

338.905
DE

Educ

PERIODICAL

DEVELOPMENT DIGEST

THE LIBRARY OF THE

MAR 01 1966

UNIVERSITY OF ILLINOIS

Volume III Number 3 October 1965

Prepared by the
NATIONAL PLANNING ASSOCIATION
WASHINGTON, D.C.
U.S.A.

Inclusion of material in this publication does not imply
that the opinions and conclusions expressed therein
are necessarily those of the United States Government.

THE LIBRARY OF THE

NOV 17 1965

UNIVERSITY OF ILLINOIS

The DEVELOPMENT DIGEST is prepared for the Agency for International Development by the National Planning Association, a private non-profit organization in Washington, D. C.

The material in this DIGEST may be freely reproduced in the less developed countries, either in the original English or in translation into local languages, or may be adapted, provided credit is given to the author and original source, and further provided that the sense of the original is not distorted in adaptations. Where material carries a copyright notice, this notice must also be included in the credit citation.

Inclusion of material in the DEVELOPMENT DIGEST does not imply that the opinions and conclusions expressed therein are necessarily those of the United States Government or of the National Planning Association.

Inquiries or suggestions concerning any of these materials, or the original articles, should be directed to the U. S. AID Mission (or to the AID Representative) in each country. Where AID has no representative, send inquiries to:

Office of Technical Cooperation and Research
Agency for International Development
Department of State
Washington, D. C. 20523

DEVELOPMENT DIGEST

Volume III - Number 3

October 1965

A journal of
selected excerpts, summaries and
reprints of current materials on
economic and social development

Prepared by the NATIONAL PLANNING ASSOCIATION
William I. Jones, DIGEST Editor

for

AGENCY FOR INTERNATIONAL DEVELOPMENT
DEPARTMENT OF STATE
Washington, D. C. 20523

DEVELOPMENT DIGEST

Volume III - Number 3

October 1965

CONTENTS

ECONOMIC DEVELOPMENT AND POPULATION GROWTH

INTRODUCTION	1
POPULATION GROWTH: SOME ECONOMIC ASPECTS Oscar Harkavy	2
POPULATION AND ECONOMIC DEVELOPMENT Ansley J. Coale	9
THE DISTRIBUTION OF GAINS FROM ECONOMIC DEVELOPMENT Felix Paukert	18
SOME ECONOMIC ASPECTS OF SLOWING POPULATION GROWTH Stephen Enke	24
FAMILY PLANNING PROGRAMS THROUGHOUT THE WORLD Bernard Berelson	28
WORLD POPULATION CONFERENCE	34

REGIONAL INTEGRATION

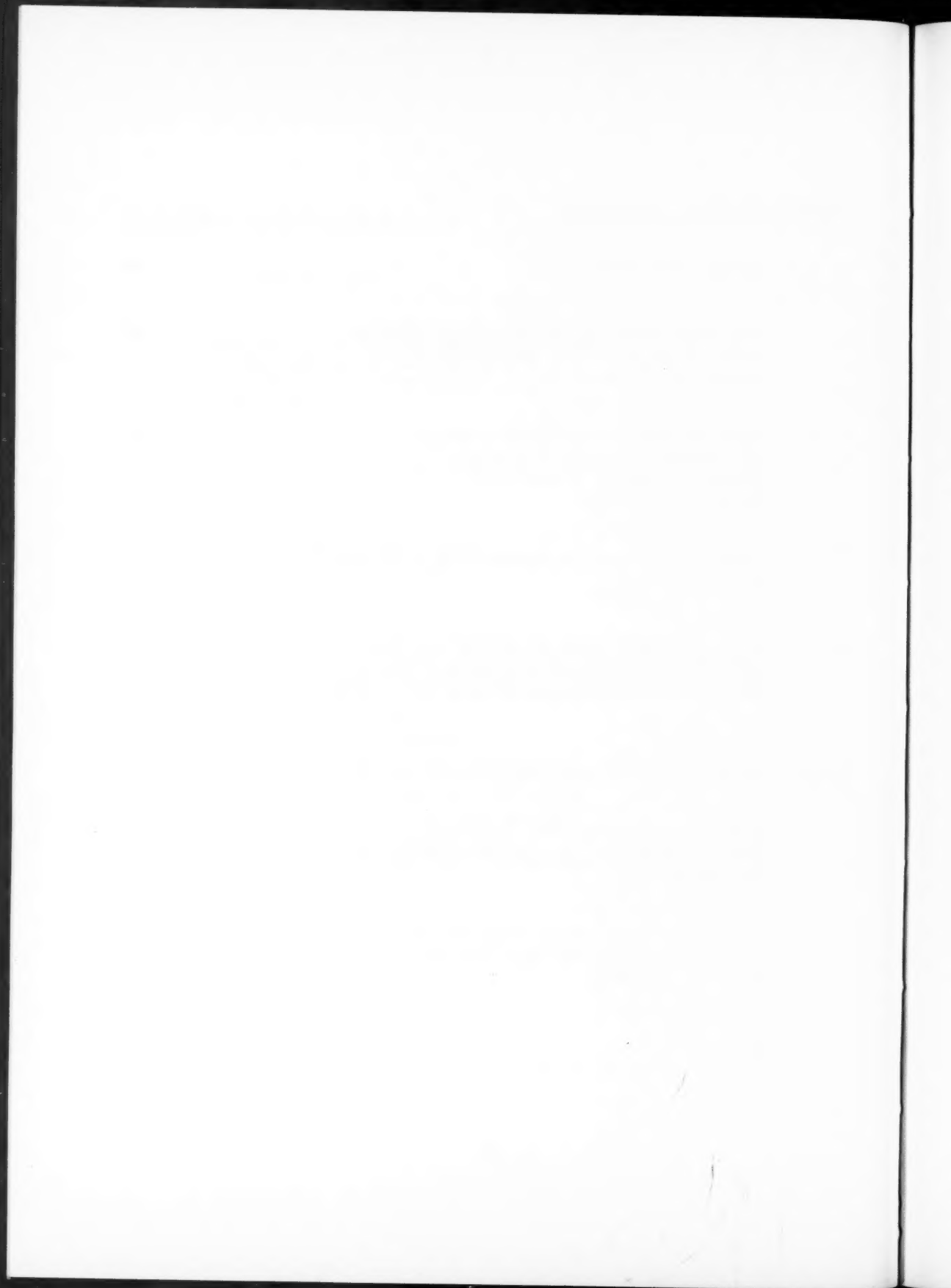
INTRODUCTION	35
REGIONAL INTEGRATION AND THE INDUSTRIALIZATION OF LESS DEVELOPED COUNTRIES Sidney Dell	36
THE CENTRAL AMERICAN COMMON MARKET	47
LATIN AMERICAN FREE TRADE ASSOCIATION Miguel S. Wionczek	53
PROPOSALS FOR THE CREATION OF THE LATIN AMERICAN COMMON MARKET Felipe Herrera, José Antonio Mayobre, Raúl Prebisch and Carlos Sanz de Santamaría	66
DISTRIBUTING THE BENEFITS OF ECONOMIC INTEGRATION AMONG MEMBER COUNTRIES: THE EXAMPLE OF THE EAST AFRICAN COMMON MARKET Peter Newman	71

AGRICULTURAL PLANNING

INTRODUCTION	79
POPULATION GROWTH, FOOD NEEDS AND PRODUCTION PROBLEMS Lester R. Brown	80
THE INCREASING IMPORTANCE OF AGRICULTURE IN ASIAN DEVELOPMENT STRATEGY Walt W. Rostow	90
AGRICULTURAL PLANNING IN TAIWAN S. C. Hsieh	98
MIT CONFERENCE ON PRODUCTIVITY AND INNOVATION IN AGRICULTURE IN THE UNDERDEVELOPED COUNTRIES	105

SOCIAL ADAPTABILITY AND ECONOMIC GROWTH

SOCIAL FLEXIBILITY, SOCIAL DISCIPLINE AND ECONOMIC GROWTH Hla Myint	107
SOCIAL STRUCTURE, CULTURAL VALUES AND ECONOMIC GROWTH Cyril S. Belshaw	116



ECONOMIC DEVELOPMENT AND POPULATION GROWTH

Both higher national income per capita and improved health and longevity are considered indications of economic growth. The former shows that the people can have a fuller life in terms of goods and services; the latter, that they can expect to enjoy a longer and healthier life and to see a higher percentage of their children grow up. However, there is an important relationship between the two. If improvements in health and mortality precede growth of national productive capacity, the problem of providing for the wants of the people whose lives have been preserved will be exacerbated. Health services are only one of the necessities for a full life, and must be complemented by food, housing, etc. Also, if people who now have access to modern medicine continue to have the same number of children they wanted for social insurance when death rates were high, very rapid population growth will ensue. In consequence, their country will be faced with the formidable task of rapidly expanding output just to provide for its new citizens.

The authors of the selections in the following section deal with the relationship between population growth and economic development. Oscar Harkavy presents a general and comprehensive picture of the interactions. Ansley Coale describes the situation in greater detail, ascertaining, by means of a projection, the effects of continued high population growth versus moderated population growth on per capita income in a hypothetical country. Analyzing UN national income data for a group of less developed countries, Felix Paukert shows how the gains from economic growth in the period in question were distributed to provide for additional population, for increased per capita private and government consumption, and for investment. Stephen Enke's calculations are a first attempt to determine the relative efficiency of using resources for family planning or for investment in conventional development projects. The final article by Bernard Berelson provides a brief review of the population control programs presently under way in the less developed countries.

POPULATION GROWTH: SOME ECONOMIC ASPECTS

Oscar Harkavy

[From "Population Growth: Some Economic Problems,"
Population Growth - Threat to Peace?, William E.
Moran, Jr. (ed.), New York, P. J. Kenedy & Sons,
1965, US\$4.50, pp. 105-118.]

[Population Growth - Threat to Peace? contains the papers presented at the 37th Annual Conference of the Catholic Association for International Peace, held in Washington, D. C. on October 22-25, 1964. The Conference was cosponsored by Georgetown University as part of the observance marking the 175th anniversary of its founding. In addition to the papers by Oscar Harkavy, excerpted here, and by Bernard Berelson on pages 28-33 below, the volume includes essays on population issues in the United States, in Latin America and in Asia, and on population research.]

These are
excerpts
from the
paper.

The Secretary General of the United Nations recently asked the member nations to prepare extensive statements on "the reciprocal action of economic development and population change." I cannot concur with the conclusion expressed by several Western European countries that "present policy should provide for an adjustment of economic conditions to the demographic situation rather than an adaptation of population to economic conditions." I admit that this would be the preferable course of action if there were complete freedom of choice. But, I believe that rapid growth of population stacks the odds against the developing countries of Asia, Africa and Latin

Oscar Harkavy is Director of the Population Program
of the Ford Foundation, New York.

America as they struggle to release the mass of their citizens from poverty.

Investment in factories, agricultural improvement, roads, and technical education -- the conventional instruments of economic development -- must be accompanied by investment in national programs designed to reduce the birth rate if rising per capita income is to be achieved by the poor nations of the world. Referring again to the United Nations inquiry, the governments of Ceylon, Chile, Guatemala, India, Iran, Jamaica, Jordan, Korea, Lebanon, Pakistan, Panama, the Philippines, Taiwan, Tunisia, Turkey, and the UAR express doubts as to whether they can satisfy the needs and aspirations of their people during the next decade in the face of rapid population growth.

Population Density

Although the picture that first comes to mind in confronting the "population explosion" is a dense mass of humanity, crowding is not necessarily associated with poverty. There are about 327 people per square mile in India and 21 people per square mile in Laos. Both have per capita income of about \$80 a year. On the other hand, the megapolis stretching from Boston to Washington has a population density of more than 2,000 per square mile, while enjoying a median family income of nearly \$7,000 a year. Were this area dependant on agriculture or mining and unable to trade with the rest of the United States or with the rest of the world, 2,000 people crowded together on each square mile would be able to eke out but a miserable livelihood. To take another example, per capita income in Hong Kong, with a density of 8,000 per square mile, has risen 7 to 10 percent a year since World War II. Despite a huge influx of refugees from mainland China, Hong Kong is one of the most prosperous countries in Asia because of its vigorous industry and world trade.

Overcrowding is undesirable for many reasons. But, those responsible for a nation's population policy will make a grave mistake if they focus exclusively on population density. Latin America, where one-fourteenth of the world's population lives on one-seventh of the world's land mass, does not suffer from "overpopulation" in terms of density per square mile. However, Latin America faces major problems brought about by its high rate of population growth. It is hard pressed to provide adequate food, housing, and education for its children and productive employment for new entrants to the labor force. Also, the great proportion of dependent children in a fast-growing population is a heavy handicap to poor nations that wish to lift themselves by their bootstraps.

Food and Natural Resources

Today, there is grave question whether continued growth of world population will not outrun our food supply. Long-term projections of food supplies are notoriously unreliable. We can only roughly estimate the current rate of growth of agricultural output. Furthermore, one can only speculate about the effect of changes in agricultural technology and organization on future output. There may be quantum jumps in technology deriving from artificial photo-synthesis or from vastly improved methods of gathering food from the sea.

Between 1934-1938 and 1961 it is estimated that there has been a 14 percent increase in world per capita grain production. But at the same time, output of grain per person decreased 2 percent in Asia and 16 percent in Latin America. It has risen 8 percent in Africa and 5 percent in Eastern Europe and Russia, but the major progress has come in Australia-New Zealand (up 51 percent), North America (up 44 percent), and Western Europe (up 19 percent).

India, with more than 450 million people, will have 187 million more in fifteen years. Thus, in the next fifteen years, India will have to find a way of feeding an increase in population about equivalent to the present population of the United States. Since India has little additional land that can be brought into cultivation, her farmers must increase yields per acre on existing farm land by at least 50 percent between now and 1980. A United States Department of Agriculture expert calculates that an additional 24 million tons of fertilizer a year must be applied to achieve this performance, but the entire world production of fertilizer is now only 28.6 million tons a year.

It is entirely possible for India and most other countries in the world to grow or to import enough food at least to keep their people from starving in the next few decades. However, this would require a revolution in traditional agricultural technology, as well as in arrangements of land tenure, credit, marketing, and transportation. The kinds of changes in attitudes and behavior that are likely to produce increased crop yields are analogous to those that would be required to bring down birth rates. India, in fact, is engaged in two large-scale, complementary efforts. One is a series of intensive experiments in which all elements required to improve agricultural productivity are applied to the land. The other is an intensive district program in family planning intended to apply the best technology and administration to a reduction in birth rates.

The future of the world's supply of raw materials other than food is also difficult to visualize with any certainty, but the situation is far from hopeless. The world's entire stock of fossil fuels (coal and oil) may be depleted in one hundred and fifty to two hundred years, but

alternate energy resources will probably mean that there will be sufficient energy for the world's use in the foreseeable future. As far as metals are concerned, there are good substitutes which will be used increasingly as the prices of the scarce metals rise. It is doubtful whether the world's forests will long be able to withstand the demands made upon them. But, again, it will be possible to substitute steel, aluminum, and other building materials for wood. Water demand and supply are exceedingly difficult to estimate far into the future. Assumptions must be made as to the extent of future investment in massive river development projects. The demineralization of brackish and even ocean water can be accomplished with existing technology and will become increasingly economic as inexpensive sources of energy, such as solar energy, are developed. Nevertheless, these optimistic predictions assume timely investment of huge amounts of capital to anticipate the demands of the growing population.

Capital Accumulation and the Burden of Dependency

Developing countries are kept poor by lack of productive capital (fertilizer and farm machinery, industrial plant and equipment) and by too few highly trained and motivated technicians, engineers, and managers to make optimum use of that capital which is available. Capital accumulation is the essence of economic development. It is the primary path to increased income per capita. Aside from foreign economic aid and investment by foreigners, a nation accumulates capital by investing that part of its income not spent on consumption. In other words, the more a nation saves, the more is available for investment in productive capital.

In rich countries, which already have accumulated large amounts of capital, savings of individuals and business firms run between 10 and 20 percent of national income. These savings are usually sufficient to provide as much new investment as is required by business and government. On the other hand, in the capital-poor, developing world, only a trickle of savings (from 0 to 7 percent of national income) can be turned into productive capital.

The dramatic declines in mortality experienced in the developing countries have primarily affected infant and child mortality; they have not appreciably extended life expectancies at the upper end of the age scale. Thus, while in the industrialized countries the proportion of children under the age of fifteen is about 25 to 30 percent; in the developing countries, children under fifteen constitute between 35 and 50 percent of the population. These children -- who are consumers for many years before they are producers -- constitute a great burden of dependency that hinders economic development.

Countries with a rapidly growing population must spend a greater proportion of their income feeding their children, clothing and housing them, and providing them with a rudimentary education than is necessary in those nations in which population increases more slowly. With a given national income, a fast-growing population must spend so much on primary education to achieve minimum levels of literacy of its young children that it has little left over for the training of engineers; it must spend on family housing what it otherwise could invest in hydro-electric plants and steel mills.

In addition to its effect on the accumulation of capital, the dependency burden weighs heavily on the resources of a developing country that tries to provide its children with a minimum level of food, housing, and education. Those responsible for economic planning in Latin America (which has the world's fastest rate of population growth) and the emerging nations of Africa, even if there is no immediate problem of overcrowding, are overwhelmed by the amount of food, the numbers of new houses, schoolrooms, teachers, and slates and pencils that are implied by simple projections of population growth during the next decades.

Employment

With the passage of time, the dependents in the zero to fifteen year age bracket will enter the fifteen to sixty-four age group, and look for work. It is obvious, but sometimes forgotten, that mere additions to the labor force do not necessarily mean that total production is increased. If the ratio of labor to productive capital is already high, as is the case in developing countries, more entrants to the labor force may mean more unemployment and underemployment. For example, in India it is estimated that 8 million new jobs were created from 1956 to 1961, but the working population increased by 10 million in the same period. As stated in the United Nations Report on the World Social Situation in 1963:

"...even if all the liberal provisions and estimates for the creation of additional employment that are contained in the various Asian development plans were to be completely fulfilled, the problem of rural unemployment and underemployment in most countries of the region will not be solved unless the efforts to control population growth prove more successful than they have in the past."

Modern technology is directed toward producing more and more with less and less labor. Thus, in the developing world, the very process of introducing and modernizing technology is likely to exacerbate the unemployment problem -- at least in the short run. An increased number of unskilled laborers is hardly the key to economic development.

Waiting for the Demographic Transition

Despite the obstacles to capital accumulation presented by population growth, the emerging countries are gradually becoming more industrialized, and great urban complexes are rapidly growing. Some argue, therefore, that the developing countries are bound to go through the demographic transition of late nineteenth-century Europe and the United States when a reduction in birth rates was a concomitant of increasing urbanization and industrialization. Thus, it is asserted that scarce resources and administrative effort would be more wisely applied to speed up the pace of industrial development than to finance national programs of fertility limitation.

With improvements in medicine and agriculture, and with economic well-being enhanced by technological and organizational advances in industry and commerce, mortality began to decline slowly in nineteenth-century Europe. Birth rates continued to average around 30 per 1,000 well into the century, but began to decline beginning about 1875 in Western Europe.

There are, however, profound differences between the situation that prevails today in the developing countries and the circumstances under which the industrialized Western nations, followed by Japan, underwent their demographic transition. The surge in population brought about by swift declines in mortality through imported public health measures is taking place at an earlier stage of development than was the case in the West. Even if European patterns were retraced, it would take the developing countries at least thirty to sixty years to arrive at a state of industrialization that will bring with it declines in fertility. But in the meantime, population is growing much more swiftly than ever before in history. The rate of natural increase (births minus deaths) rarely rose above 1.5 percent in nineteenth-century Europe, but between 1950 and 1960 it averaged 3.2 percent per year in Taiwan, 2.7 percent in Ceylon, 3.2 in Malaya, and 3.4 in El Salvador.

With rates such as these, per capita income is more likely to fall than to rise during the coming decades. The growth in prosperity that is seen as a condition precedent to fertility reduction in the face of declining mortality is not likely to be achieved by the masses in the developing countries. The urbanized, prosperous elite almost universally take the lead in limiting the size of their families. Unfortunately, they constitute only the thinnest layer of population in these countries. Unless their example influences the behavior of the people at large, their action will have little effect on national birth rates.

Economics of Fertility Limitation

One cannot escape the conclusion that it is wishful thinking to expect the forces of industrialization and urbanization to bring down birth rates in the developing countries within the next few decades without deliberate action. The dollar-and-cents benefits derived from a reduction in the birth rate are so great that governments are justified in allocating a substantial share of national resources to programs of fertility limitation, provided, of course, the programs are effective. Economists who have attempted estimates conclude that a dollar invested in fertility control is many times as effective in increasing income per capita as a dollar invested in plant and equipment. Then there remains the very uncertain determination of the number of births prevented per dollar of expenditure on a given family planning program.

Those who are responsible for the direction of economic and social development of their nations must do the best job they can with the knowledge available to calculate the costs -- in political, social, and ethical terms, as well as in rupees or pesos -- of national programs of fertility limitation. They must balance these costs against the political, social, ethical, and monetary costs of letting the growth of population take its natural course.

POPULATION AND ECONOMIC DEVELOPMENT

Ansley J. Coale

[From *The Population Dilemma*,
Philip M. Hauser (ed.), Prentice Hall,
Inc., Englewood Cliffs (N. J.), 1963,
US\$3.95 (clothbound), US\$1.95
(paperbound), pp. 46-69.]

[The article by Professor Coale excerpted here is contained in the background volume prepared for the Twenty-third American Assembly, held at Arden House, Harriman (N. Y.) Campus of Columbia University, May 2-5, 1963. The American Assembly is a nonpartisan institution which holds assemblies of American leaders to discuss important issues. Other issues treated in the volume include world and United States population growth, the future availability of natural resources, and population control.]

These are
excerpts
from the
paper.

It is the purpose of this paper to consider how the demographic characteristics of the low-income countries are related to their poverty, and how their population trends will influence their modernization. The changes in social and economic structure that make up the process of modernization or industrialization are many and profound. Here only the increasing income per person as a consequence (and an index) of industrialization will be considered.

Population and Income Per Head

Examining the implications of population change for the growth of real income, the possibility of

Ansley J. Coale is Professor of Economics
and Director of the Office of Population
Research, Princeton University (N. J.).

alternative courses of mortality can be ignored, at least for a generation or two. The basis for paying little attention to different possible courses of mortality is that the technical feasibility of reducing mortality to lower levels -- of increasing expectation of life at birth at least to some 50 or 60 years -- has been widely demonstrated in the underdeveloped areas themselves. Unless the effort to start and continue the process of modernization fails completely, or unless there is a breakdown in world order, the attainment and maintenance, at least for a short time, of low mortality rates seems potentially within the reach of most low-income countries. It does not appear that widespread famine or even severe increases in malnutrition are a necessary consequence in the next few decades, even if the low-income countries experience population growth rates of 2 to $3\frac{1}{2}$ percent.

The agricultural and industrial technology that can be introduced into low-income countries is, in a sense, parallel to the medical technology that can be imported to achieve rapid reduction in mortality rates. Rates of increase in agricultural output of at least 3 or 4 percent a year appear technically feasible.

Finally, if sickness can be reduced and death postponed within the resources available to the health authorities in the underdeveloped countries, it is scarcely imaginable that, by deliberate policy, these opportunities would be foregone. In other words, the only factor that can be realistically considered as a variable in causing population change by deliberate policy is fertility. We shall be concerned here with the implications, for the growth in per capita income, of alternative possible future courses of fertility.

Alternative Population Projections

It is possible to translate assumptions about the future course of mortality and fertility in a specific population into numerical estimates of the future size and age composition of that population. Table I presents the projection one hundred fifty years into the future of a hypothetical initial population of one million persons with an age distribution and fertility and mortality rates roughly typical of most tropical Latin American countries. The current birth rate is about 44 per 1000; the current death rate is about 14 per 1000, so that the population is growing at 3 percent per year. The current expectation of life at birth is about 53 years, and the average number of children born by age 45 is slightly over 6. It is assumed that, in the next thirty years, the expectation of life at birth will rise to approximately 70 years; so that mortality risks at each age become closely comparable to today's experience in the most highly industrialized countries. Once the expectation of life reaches seventy years, no further improvement is assumed.

The initial population and the expected mortality risks at each age in the future are the same for the two projected populations. However, two contrasting assumptions are made with regard to the future course of fertility. In projection A, it is assumed that the current rates of childbearing continue indefinitely into the future. In projection B, it is assumed that fertility rates are reduced each year for twenty-five years by 2 percent of their initial value, so that, in twenty-five years, fertility is reduced by a total of 50 percent. After twenty-five years, this projection is based on a continuation of fertility at 50 percent of current levels.

[Since this paper was prepared in 1963, improvements in contraceptive technology have made feasible reductions in fertility more rapid than the 2 percent per year postulated here. Thus, national development plans project annual reductions of fertility of 3.4-5.1 percent in Korea, 4 percent in Pakistan, 4.2 percent in Turkey and 6 percent in Tunisia.]

TABLE I
Illustrative Projections of the
Population of an Underdeveloped Area
(Population in Thousands)

Year	0	10	20	30	40	50	60	150
Projection A								
Age 0-14	434	616	870	1,261	1,840	2,655	3,848	110,700
Age 15-64	534	718	996	1,406	2,003	2,901	4,204	120,800
Age 65+	32	43	65	90	132	180	245	14,000
Total	1,000	1,377	1,931	2,757	3,975	5,736	8,297	245,500
Projection B								
Age 0-14	434	567	637	676	783	901	994	3,014
Age 15-64	534	718	985	1,287	1,573	1,869	2,181	6,613
Age 65+	32	43	65	90	132	180	245	850
Total	1,000	1,328	1,687	2,053	2,488	2,950	3,420	10,477

We will inquire what effects these contrasting trends in fertility would have on three important population characteristics: first, the burden of dependency, defined as the total number of persons in the population divided by the number in the labor force ages (15 to 64); second, the rate of growth of the labor force, or more precisely, the annual percent rate of increase of the population 15 to 64; and third, the density of the population, or more precisely, the number of persons at labor force age relative to land area and other resources.

Then we shall consider how these three characteristics influence the increase of per capita income.

The three population characteristics whose implications are to be examined here are of differing relative significance in the short run, over an intermediate period, and in the long run. In the first twenty-five or thirty years, the age distribution effect, or the difference in burden of dependency, is almost the sole factor at work. There is a rapidly widening difference between the projected populations in the burden of dependency during the first generation. This difference in dependency, once established, then continues more or less unchanged. Starting in about twenty years there develops first a slight, and then a widening difference, in the rate of growth of the population of labor force age. This difference in the rate of increase reaches a maximum (thereafter maintained) in about sixty-five to seventy years (or forty to fifty years after fertility levels off). The period of widening differences in the growth rate will be considered as an intermediate one separating the short and the long run. The two projections have essentially constant differences in age composition and rate of growth in the long run (from sixty-five to seventy-five years on). During the intermediate period, there develops an increasingly conspicuous difference in the size of the two labor forces, and therefore in the density of the labor force relative to resources. In the long run, the difference in density assumes overwhelming dimensions. For example, in something less than three hundred years, the high fertility population would be a thousand times bigger than the lower fertility population.

Economic Development and Demographic Variables

We shall consider primarily the implications of our demographic variables for the capacity of the economy to divert effort and resources from producing for current consumption to producing for the enhancement of future productivity. In other words, it will be assumed that, to accelerate the process of modernization, an economy must increase its level of net investment. Net investment here means additions to factories, roads, irrigation networks, fertilizer plants and other productive facilities. It also can include, in a broad definition, resources and effort devoted to education and training. It is not an intended implication that merely stepping up the rate of new investment automatically insures a major speed-up in industrialization, or assures the attainment of the fastest possible pace of modernization. Resources mobilized for productive purposes must be wisely allocated. Adequate leadership must be found for the new forms of productive organization that an industrialized society requires. Long-standing customs and traditions must be altered if new and more effective techniques of production are to be employed. In other words, a high level of net investment is a necessary, but not a sufficient, condition for a rapid pace of industrialization. In the ensuing

analysis, it will be assumed that the other crucial elements in modernization are present.

Age Distribution and Investment

At the end of twenty-five years, there is only a 4 percent difference in the size of the labor force. Let us suppose that productive employment can be found for all males of labor force age seeking employment and for all females who are not bound to housekeeping duties by lack of education, tradition, and the necessity to care for small children and who also are in search of productive employment. Let us assume further that twenty-five years from now the progress toward modernization has included the establishment of virtually universal primary education, so that the effective age of entry into the labor force is not before age 15. Let us also make the provisional assumption that national income is, in the twenty-fifth year, the same for the two projected populations.

If there were the same total national income to be utilized by the two projected populations, the pressure toward utilizing nearly all of it for consumption would be substantially greater in the high fertility population, as a direct result of the greater burden of dependency that must be borne by the labor force. In the high fertility population after twenty-five years, there would be 96 persons in the dependent ages for every 100 persons in the productive ages, while in the low fertility population there would be only 65 dependents for every 100 persons in the labor force. The pressure to spend a high fraction of national income on consumption can take many forms in different kinds of economies. In a capitalist economy, where investment is financed out of private savings, the fact that families with a large number of children find it more difficult to save reduces the volume of savings and hence the level of investment. When low-income families are not an important source of savings, higher fertility creates social pressure to increase the share of the national income received by the poorest earners (the nonsavers) in order to maintain minimum standards of consumption.

When it is the government, rather than individual entrepreneurs, that provides a large proportion of national investment, fertility affects the level of investment through its effect on the capacity of the government to raise money through taxation. Suppose the government attempts to maximize the funds it mobilizes for net investment. For any given level of deprivation that it is prepared to impose, it can raise more taxes from a low fertility population than from a high fertility population with the same national income and the same number of adults in each. Even if the government does not calculate the maximum revenue it can assess, the existence of such factors as exemptions for children would automatically reduce income tax revenues.

Given the same labor force and the same total national income, a low fertility population will achieve a higher level of net investment than a high fertility population. It will, therefore, be able to make larger additions to the productive capacity of the country and achieve a higher national product in the next year.

During a short-run period of twenty-five to thirty years, the age distribution effect of declining fertility enhances the capacity of the economy to increase its net investment and to produce a more rapidly growing national product than a population which kept its fertility unchanged. This more rapid growth would cumulate into a consequentially higher total product at the end of the thirty-year period. In other words, in the short run, not only does a population with reduced fertility enjoy the benefit of dividing the national product among a smaller number of consumers, it enjoys the additional benefit of having a larger national product to divide.

Effects of Labor Force Growth

After twenty-five or thirty years, declining fertility begins to cause major differences in the growth rate and, later on, major differences in the size of the adult population. The different rate of growth of the labor force itself assumes important dimensions.

The significance of the growth of the labor force for income per head is that higher rates of growth imply a higher level of needed investment to achieve a given per capita output, although there is nothing about faster growth that generates a greater supply of investible resources. A larger labor force requires a larger stock of productive facilities in order to have the same productivity per head. The percent of national income that must be invested merely to keep productivity from declining is some three times the annual percent rate of increase of the labor force. In other words, if the labor force were growing by 3 percent a year, a level of net investment of 9 percent of national income would be required to prevent declining productivity, while if the rate of growth of the labor force were 1 percent a year, the needed level of investment for this purpose would be only 3 percent of national income.

Another way of presenting the difference between a rapidly growing and a slowly growing labor force is to consider the effect of net investment at the respectable rate of 15 percent of national income. A population with a rate of growth of 3 percent in its labor force can, with such a level of net investment, add about 2 percent per year to the endowment of capital per worker. If the labor force were growing at 1 percent, the annual increase in the stock of capital per worker would be 4 percent.

An economy where additional members of the labor force settle on empty land, a "frontier society," is a partial exception to the above line of reasoning. If frontier settlement provides an outlet for the growth in the labor force, it is possible that new members provide most of their own capital -- by clearing land, constructing roads, building houses, etc. Under these hypothetical circumstances, the rate of capital formation might be automatically higher with a more rapidly growing labor force. However, it is uncertain whether there are genuine instances of this kind of frontier settlement without substantial capital investment in the world today.

During the intermediate period, when reduced fertility results in a substantially slower growth of the labor force, the age distribution advantage would continue. A greater capacity to allocate output to investment would be combined with a less imperative necessity to invest merely to keep up with the growth of the labor force.

Effect of Density

The question of population density tends to be the dominant concept in most casual thought about the population problems of underdeveloped areas. The notion of excessive density is certainly implicit in the term "overpopulation." The underlying idea is that when there are too many workers relative to the available resources, per capita output is smaller than it would be with a smaller number of workers. Given gross enough differences in the numbers of workers being compared, it is certainly possible in principle to establish that overpopulation in this sense exists. For example, in 150 years, the high fertility population that we projected would be eighteen times as large as the population that would result from a 50 percent reduction in fertility. Even the labor force with reduced fertility would imply a density more than twelve times greater than at present, while the population with sustained fertility would involve a density more than 200 times greater than at present. There is little doubt that in most countries a density 200 times greater would have a depressing effect upon per capita output compared to a density twelve times greater. So far as acceptable and attainable policies are concerned, only in the relatively distant future can the density of the labor force relative to resources be affected. In the meantime, the policy that would have a long-run effect on density, namely one that reduces fertility, would, through changes in dependency and differences in the annual rate of growth of the labor force, have produced major desirable economic effects.

A second observation about the relevance of density is in order. In all industries, productivity is determined, to a large degree, by the stock of capital per worker. The underdeveloped areas have in common a small endowment of productive equipment per worker relative to the industrialized countries; in other words, the underdeveloped

countries all have a "high density" of workers relative to capital, whether the country appears to be sparsely or densely settled relative to land and other resources. Therefore, the effects not only of the age distribution but also of the rate of growth of the labor force (with their respective implications for the ease with which capital formation can proceed and for the rate at which it must proceed to attain given objectives in per capita output) operate in sparsely settled as well as in densely settled countries. In very sparsely settled countries, the adverse effect upon the possible reduction of density relative to capital of rapid growth of the labor force may be partially offset by an increasingly advantageous relationship between numbers and land area and other resources. A larger population may, when original density is unusually low, permit the use of more efficient large-scale operations. This possibility does not imply, however, that the more rapid the rate of growth the better. Additional capital for the additional labor force is still essential, and rapid growth prevents an increase in the capital/worker rates.

Gains in Income Per Head

It is possible to estimate roughly the cumulative advantage that reduced fertility brings in the form of more rapidly increasing income per head, utilizing alternative population projections and concomitant economic projections based on the demographic and economic data of two countries, India and Mexico. In each instance, we assumed that increases in savings per consumer were proportional to increases in income per consumer. In calculating the number of "consumers" each child under 15 was counted as only one half. Thus, the calculations made a conservative allowance for the effect of the burden of childhood dependency. These calculations take account of the estimates of government authorities and economists in each country with regard to such matters as the expected productivity of new investments and of the allocation of funds to education, housing, and other social overhead categories. On the basis of precisely equivalent assumptions about the determination of the future growth of national output, national output was projected into the future, in conjunction with two alternative population projections.

In spite of different initial economic and demographic conditions, the estimated proportionate gains resulting from reduced fertility were almost identical in the two countries. Table II shows the ratio of income per consumer with reduced fertility to income per customer given sustained fertility at various dates following the initiation of the fertility decline. The difference is small at first but amounts to 40 percent after thirty years and more than 100 percent in sixty years. After 150 years, the low fertility population would have an income per consumer six times as high as the faster growing population with unchanged fertility.

These calculations make no allowance for any adverse effects caused by high density. They allow only for the effect of differences in age distribution and of different rates of growth in the labor force. These projections of the advantages of reduced fertility implicitly assume a world of unlimited resources, and thereby understate the gains a lower birth rate would bring.

TABLE II

Income Per Equivalent Adult Consumer in Projection B
(Fertility Reduced) as a Percentage of Income per Consumer in
Projection A (Fertility Sustained)

Years	0	10	20	30	40	50	60	70	80	90	100	150
Projection B	100	103	114	141	163	186	209	235	264	297	334	596
Projection A	100	100	100	100	100	100	100	100	100	100	100	100

Conclusion

The underdeveloped areas in the world for the next fifty years or so have a choice at best between very rapid growth and moderately rapid growth in population. Any low-income country that succeeds in initiating an immediate reduction in fertility would, in the short run, enjoy a reduction in the burden of child dependency that would permit a higher level of investment and more immediately productive uses of investment.

After twenty-five or thirty years, the advantage of reduced dependency would be enhanced by a markedly slower growth of the labor force, making it possible to achieve a faster growth in capital per worker from any given investment, and making it easier to approach the goal of productive employment for all who need it.

In the long run, the slower rate of growth that fertility reduction causes would reduce the overwhelming multiplication of density that continued rapid growth implies.

The above material is copyrighted and may be freely reproduced only in the less developed countries. This restriction must accompany each reproduction and a complete credit citation must be given as follows:

From "Population and Economic Development" by
Ansley J. Coale; The Population Dilemma, Philip
M. Hauser (ed.), copyright © 1963 by Prentice
Hall, Inc., Englewood Cliffs (N. J.).

THE DISTRIBUTION OF GAINS FROM ECONOMIC DEVELOPMENT

Felix Paukert

[From International Labour Review,
International Labour Office, Geneva,
Volume XCI, Number 5, May 1965,
US\$0.60, pp. 367-392.]

These are
excerpts
from the
article.

Our aim is to examine the progress of the developing countries over the last six to 11 years in order to find out how this progress has been translated into economic and social well-being, -- how the gains from economic development have been distributed among particular uses. This study will be confined to the exploration of one particular type of distribution -- perhaps the most significant -- namely that between private consumption, social consumption (i. e., government services) and investment. We shall, however, modify this classical threefold distribution by introducing a fourth element: population growth. We shall calculate the distribution of gains from economic growth between these four end uses. We shall note the peculiar features of this distribution in the particular regions of the developing world and compare them with the distribution patterns of some industrialised countries.

The Method of the Study

The standard measure of the money value of goods and services becoming available to a country from economic activity is the national income.

Felix Paukert is a member of the staff of the International Labour Organization working in the Economic Branch, International Labour Office, Geneva.

National income can be regarded in different ways but we shall consider it as a sum of expenditures. The United Nations Yearbook of National Accounts Statistics presents data on the expenditure concept of national income in the following way:

1. Private consumption expenditure, plus
2. General government consumption expenditure, plus
3. Gross domestic fixed capital formation, plus
4. Increase in stocks, plus
5. Exports of goods and services, less
6. Imports of goods and services, equals
- Expenditure on gross domestic product, plus
7. Net factor income from abroad, equals
- Expenditure on gross national product

In our calculations we shall be mainly concerned with the first four items: 1) private consumption expenditure -- referred to herein as "consumption," 2) general government consumption expenditure -- referred to simply as "government" or "government services," and 3) and 4) gross domestic fixed capital formation, and increases in stocks, which will be taken together and referred to as "investment."

These three types of expenditure -- consumption, government services and investment -- amount together, more or less, to the value of gross domestic product at market prices. The sum of items 5 and 6 may be positive or negative, depending on whether the country has an excess of exports over imports or vice versa. We shall ignore this sum, and consequently, we shall not deal with the gross domestic product (G. D. P.) proper, but with a close approximation, the "locally used gross domestic product (L. U. G. D. P.)."

By the gains from economic growth, we shall understand the difference between the L. U. G. D. P. in the final and in the base period. If we confined our analysis to the three elements mentioned above -- consumption, government services and investment -- the increments in the three elements would sum by definition to the increment in the L. U. G. D. P.

This type of analysis would, however, neglect one important aspect of the present situation in the developing countries: the rapid growth of population. If the L. U. G. D. P. of a country grows at 2 percent per annum and population also increases 2 percent per annum, national income per head remains the same. Unless there is some shift between the three elements (e. g., increased consumption with a corresponding decline in investment), per caput consumption, per caput government services and per caput investment remain the same. In other words, population growth swallows the whole increase in national income -- all the gains from economic growth -- and nothing

is left to increase the amount spent per head on consumption, government services or investment.

For this reason we include "population" as a fourth use on which gains from economic development may be spent. We shall use the term "population component" to designate that part of the increase in national income which it is necessary to spend in order to provide the same national income per head for the population in the final period as the (usually) smaller population had in the base period.

Incorporation of the "population component" will also affect the definition of the other three elements -- consumption, government services and investment. Now, we shall ask what amount (or share) of the increment in national income is devoted to increasing consumption per head, and similarly with investment and government services. We shall refer to this amount as the "consumption component," corresponding terms being used as regards investment and government services. Therefore, the four "components" -- population, consumption, government services and investment -- account precisely for the full amount of the increase in L. U. G. D. P., and their respective shares must sum to 100 percent.

However, while the four components must add up to the total increase in locally used gross domestic product, a particular component need not be positive. It will be negative (and its share in the total increment will be negative) if there was an actual decline in the absolute amount or even if there was an increase, provided that the increase was relatively smaller than the increase in population. The negative shares of particular components are a tangible demonstration of structural changes which shift resources from one use to another to such an extent that economic growth, even in per caput terms, may not be sufficient to keep the per caput level of a particular national income element from declining.

The distribution pattern was studied over a period of six to 11 years, according to availability of data. In order to reduce the element of change inherent in taking one year rather than another as terminus, growth and its distribution between particular components was measured not from the first to the last year covered, but rather from the average of the first two years to the average of the last two years.

The study covers those countries of Asia, Africa and Latin America for which data were available, on a comparative basis, for at least six consecutive years, yielding results covering a four-year period. The less developed countries of Western Europe were not covered; nor were the centrally planned economies, which use a different national accounting system, and whose performance can therefore not be compared with that of countries following the United Nations system.

TABLE I. DISTRIBUTION OF INCREASES IN NATIONAL INCOME OF DEVELOPING COUNTRIES
(Percentages)

Country	Period	No. of years	Annual rates of growth		Shares in the increase of			
			in -- G. D. P.	Popu- lation	L. U. G. D. P.	Con- sumption	Govern- ment	Invest- ment
Ceylon	1952/53-1957/58	5	2.3	2.5	74.3	-0.3	25.1	0.9
Chile	1953/54-1959/60	6	1.8	2.6	136.2	-8.1	-13.1	-15.0
China								
(Taiwan)	1952/53-1961/62	9	7.2	3.6	35.0	34.5	13.0	17.5
Colombia	1953/54-1960/61	7	4.3	2.2	57.8	42.4	-3.0	2.8
Congo (Leopoldville)	1952/53-1958/59	6	3.8	2.2	135.1	69.6	19.4	-124.2
Cyprus	1952/53-1961/62	9	2.9	1.4	33.0	-0.0	34.2	32.8
Ecuador	1952/53-1960/61	8	4.5	3.0	57.3	23.9	5.0	13.7
Guatemala	1952/53-1961/62	9	4.8	3.0	61.9	23.0	9.4	5.8
Honduras	1953/54-1961/62	8	3.9	3.0	82.6	19.1	6.9	-8.8
Israel	1955/56-1961/62	6	9.1	3.8	39.3	40.2	3.9	16.5
Jamaica	1954/55-1959/60	5	7.7	0.9	12.2	58.8	11.1	18.0
Japan	1955/56-1961/62	6	10.5	0.9	6.1	31.9	5.9	56.1
Korea	1953/54-1961/62	8	4.4	2.4	54.7	35.8	4.2	5.2
Nicaragua	1955/56-1961/62	6	3.7	3.4	78.1	30.3	3.8	-12.2
Nigeria	1952/53-1956/57	4	3.0	1.8	41.8	31.2	7.8	19.2
Paraguay	1955/56-1960/61	5	-1.0	2.4	273.3	-303.3	78.9	-48.9
Peru	1952/53-1957/58	5	2.2	2.4	62.8	33.1	19.2	-15.2
Philippines	1952/53-1961/62	9	5.3	3.1	55.7	25.5	6.2	12.5
Puerto Rico	1954/55-1961/62	7	6.7	1.2	14.4	45.4	12.1	28.0
Trinidad	1955/56-1960/61	5	10.0	3.1	31.8	39.7	-0.8	29.3
Venezuela	1952/53-1957/58	5	12.0	3.0	22.3	52.3	5.3	20.1

All the data in this study are derived from the figures shown in the United Nations Statistical Yearbooks for 1957, 1958, 1959, 1960, 1961, 1962 and 1963 and the United Nations Yearbook of National Accounts Statistics, 1963. Population figures are mid-year estimates published in the UN Monthly Bulletin of Statistics.

The Pattern of Distribution of Gains from Economic Growth in the Developing Countries

The study yielded results on the distributional pattern of national income increments for 21 developing countries, of which seven are Asian, 12 Latin American and two African. The table shows the basic information about these countries: the period covered, the annual percent increase in population, in gross domestic product proper and in locally used gross domestic product (both measured at constant prices), and the distribution of the increases in locally used gross domestic product between the four components. The table reveals great variety among the developing countries.

The pattern of distribution shown in the last four columns deserves detailed comment, since it really reflects the manner in which economic growth over the last decade or so has been used in the 21 developing countries.

First, there is the strikingly large share of the population component. In three countries -- Paraguay, Congo (Leopoldville) and Chile -- the population growth more than swallows the increase in national income, and income per head falls. The population takes a great part of the gains from economic growth in other countries too. Altogether, in 12 out of the 21 countries, more than 50 percent of the increment in national income went into providing for the additional population and, in two further countries, the population component, although accounting for less than 50 percent, was the largest. The average share of the population component was 69.8 percent, a figure affected by the extreme values of a few countries. A typical (median) share of the population component was 55.7 percent.

Increases in consumption per head form the second most important use of gains from economic growth. Although in four countries per caput consumption actually declined, the share of the consumption component was typically between 20 and 40 percent, with the median at 31.9 percent.

The distributional pattern was most variable in the share of the investment component. In six countries investment per head actually declined over the period, and the average share of the investment component was only 2.6 percent. On the other hand, the median country spent 12.5 percent -- and one country (Japan) as much as 56.1 percent -- of the increase in L. U. G. D. P. on investment.

The share of the government services component generally was more uniform than that of investment. The typical (median) country spent 6.9 percent, and half the countries spent between 4 and 12.5 percent on government services.

[The author has subjected 12 industrialised countries (Austria, Belgium, Denmark, France, Germany, Italy, Netherlands, Norway, Sweden, Switzerland, the United Kingdom and the United States) to the same analysis. Space does not permit the inclusion of this analysis.]

Comparison of the developing with the industrialised countries offers a striking contrast. In the developing countries, by far the most important use of the gains from economic development was catering for growing population, with consumption well behind, and government and investment (roughly equal) still further behind. In the industrialised countries, on the other hand, the most important use of economic gains was increases in per caput consumption, followed by investment, the population use being only third in importance. The following picture of the importance of particular components (with median values given in parentheses) thus emerges:

Developing Countries		Industrialised Countries	
1. Population	(55.7 percent)	1. Consumption	(45.7 percent)
2. Consumption	(31.9 ")	2. Investment	(26.5 ")
3-4. Investment	(12.5 ")	3. Population	(19.1 ")
3-4. Government	(6.9 ")	4. Government	(6.5 ")

Conclusion

There is no great difference between the rates at which the industrialised countries grow and the rates of growth of the developing countries: between 1950 and 1961 developed countries grew at an average annual rate of 4 percent and developing countries at the slightly higher rate of 4.5 percent. While this growth had, of course, very different consequences in terms of the absolute amount of resources available, relative to the income of the countries, the newly created resources were of the same order.

There was, however, a great difference in the way in which these newly created resources were distributed and utilised. Typically, the developing countries had to spend between 30 and 70 percent of the additional resources on provision for increased population, and only the remainder was available for increasing per caput consumption, investment and government services. In the industrialised countries, typically only between 10 and 25 percent of additional resources were necessary to cater for increased population, and the amount of resources going into improvement of income per head was thus much greater. This phenomenon was due to the fact that the population of the developing countries was growing much faster than that of the industrialised countries.

SOME ECONOMIC ASPECTS OF SLOWING POPULATION GROWTH

Stephen Enke

[Publication of an article by Dr. Enke on the economic aspects of birth control in The Economic Journal, London, is provisionally scheduled for March 1966.]

These are
excerpts
from an
unpublished
paper.

The past decade of planned economic development has been a disappointing experience for many aspiring peoples and their governments. National domestic production growth in most less developed countries has exceeded population growth by only one or two percentage points annually. This is one reason why half a dozen countries (India, Pakistan, Taiwan, Korea, Ceylon and Turkey) have already incorporated population planning measures into their development programs.

Supposing that raising per capita incomes is an important development goal, then, as will be shown below, rather limited resources devoted to reducing births can be as much as one hundred times as effective as other resources of equivalent value invested in raising output. A national program adequate to cut births by one-third, say, over 10 years would involve expenditures of as little as 10 cents per head yearly.

Where no such programs have been implemented, the lost opportunities are partly explained by the fact

Stephen Enke is Consultant to the Institute for Defense Analyses, Arlington (Va.) and to the Office of the U. S. Secretary of Defense. He was previously Professor of Economics at Duke University, Durham (N. C.).

that economists, in the main, and even many of those who concentrate on problems of development, have given little attention to the impact of population growth rates on output per head. Therefore, policy makers were often unaware of the economic possibilities of population planning. Also, cultural and other environmental factors help to explain their frequent indifference to issues of population.

Reasoned economic concern over high birth rates in less developed countries has little to do with theories of optimum and static population size. First, high birth rates cause a natural rate of population increase that is almost too fast to maintain per capita output in some countries. Second, high birth rates mean a high ratio of dependent children, who consume but do not produce.

Many nations' populations will double every 25 to 35 years at present rates of natural increase. Perhaps the employed labor force can double as fast, but natural resource endowments cannot increase, and many less developed countries cannot save and invest enough yearly to double their stock of capital in 30 years. Therefore, unless innovations increase final output-to-factor input rates rather more rapidly than now seems the case, aggregate output per capita may barely increase. Most of these countries cannot both have natural increases in population of from 2 percent to 3 percent annually and increases in per capita income of 3 percent a year or better. Even in the most advanced nations, there is an inverse relation between annual rate of increase in population and output per head.

Superior Effectiveness of Resources Invested in Reducing Births

Output per head (V/P) can be increased by investing resources in making the output numerator (V) larger or the population denominator (P) smaller than they would otherwise be.

Let us take the example of a country with a population of 5 millions in 1965 and output per head (V/P) of \$100 yearly. Suppose \$0.5 million worth of resources is invested every year in industrial plants to raise national output, and that the rate of return on these investments is 15 percent a year. After 10 years, \$5.0 millions have been invested, and the output increase (ΔV) attributable to it is \$0.75 million a year. Since the national output (V) in 1965 was \$500 millions, the proportionate change in yearly national output ($\Delta V/V$) due to this investment is .0015.

Now suppose \$0.5 million of resources is invested each year in a birth reduction program that stresses the use of intra-uterine devices (IUD's). The cost per participant each year is about \$1.00, so there are 500,000 participants on an average each year during the 1965-75 time period. Perhaps the live birth fertility of a typical woman

participant -- or female partner of a male participant -- is 0.15 infants a year. Thus, the reduction in births (ΔP) over 10 years is 0.75 million infants. Since national population in 1965 was 5.0 millions, the proportionate change in national population ($\Delta P/P$) due to this investment is 0.15.

If \$5.0 millions over 10 years gives ($\Delta P/P$) of .15 when used to retard population growth, and a ($\Delta V/V$) of .0015 when invested to accelerate output growth, the superior effectiveness ratio of birth reduction over output expansion ($V\Delta P/P\Delta V$) is 100 times. This ratio of superiority varies proportionately with assumed rates of fertility of women practicing contraception, and inversely both with returns to capital and with cost of program per participant.

It does not follow though that conventional development investments (e.g., power dams and cement plants) should be terminated in favor of birth reduction programs. At most, these latter programs could not usefully cost more than perhaps 1/25 of the former's budgets. Also, in free societies, the government can only use resources to slow population growth to the extent that adults want fewer children and so voluntarily participate in birth reduction programs.

Magnitude and Cost of Programs

The magnitude and cost of a birth reduction program will depend, of course, upon goals established by the government. Japan halved its birth rate in 10 years after World War II, from 34 to 17 per thousand annually, abortion being widely and openly used; but that nation cannot be considered typical of less developed countries in Asia or elsewhere. A more probable goal might be a one-third reduction in crude birth rates during a decade.

Achievement of such a goal requires that about half the couples in the procreative age groups -- couples over 25 years old being represented somewhat disproportionately -- must be effectively practicing one or another method of control at any one time.

A typical less developed country comprises about 16 men and 16 women per 100 population who are potential parents. Some of these 16 women will be pregnant in any given month and another substantial fraction will be young wives who want a child. If these women who are pregnant or who want to conceive are deducted, perhaps 8 women (or their partners) per 100 population are "eligible" in any one month to practice birth control. Realistically, there will be some rotation of participants within this group, so that perhaps 10 percent of the population are involved in any one year.

The cost per "acceptor" a year varies with the mix of contraceptive methods used. For a major national program stressing a reasonable mix of methods, but with emphasis upon intra-uterine devices, over 5 years the annual cost per participant is under \$1.00 and the cost per birth prevented during this half decade is probably under \$5.00. It follows arithmetically that the cost of the national program per head of population is 10 cents a year. These estimates are of resource costs, assuming that participants volunteer without expensive propaganda campaigns, and they are independent of whether government or acceptor pays varying fractions of them. If the whole program is financed through the government, an annual cost of 10 cents per head means government budgets that are typically about 1 percent of the economic development programs in many less developed countries.

Using Resources and Bonuses to Increase Participation

None of the less developed countries currently have 8 women (or their partners) per 100 population practicing effective birth control. The number is not a tenth as large. As government planners realize how great are the economic advantages to the nation of reducing births, there may be a greater willingness to use resources for public education on contraception, and to grant bonuses to families that practice contraception effectively. It is important also to recognize, in evaluating the relative merits of education and bonuses, that the latter are transfer payments and have no opportunity cost of production.

Various surveys indicate that many people understand very little about why reproduction occurs and how it can be prevented. The most effective and recent methods of birth control are known only to a few. Some of this ignorance can be remedied by direct education in secondary schools, to men and women in the civil service (including the military), and indirectly through radio and movies. Within limits of good taste, various methods can be described, and, at least, people can be told where there is a clinic giving further advice and assistance. All of these activities cost the economy resources. However, even if the cost per acceptor a year were thereby tripled, the annual program cost would typically be only 3 percent of all resources used for economic development in a country and the superior effectiveness ratio would be around 33.

It may be much cheaper in terms of resources for government to encourage participation through offering bonuses that are transfer payments. There is, then, a transfer of purchasing power from taxpayers to acceptors. Couples who limit births are rewarded by government in the name of society for behaving more than others in conformity with the public interest.

FAMILY PLANNING PROGRAMS THROUGHOUT THE WORLD

Bernard Berelson

[From Population Growth - Threat to Peace?,
William E. Moran, Jr. (ed.), New York,
P. J. Kenedy & Sons, 1965, US\$4.50,
pp. 119-129.]

[This paper was prepared for a conference held
in October 1964 and hence does not take account of
developments that have occurred since it was written.]

These are
excerpts
from the
paper.

The voluntary control of births by the individual couple is so close to the heart of life that there is scarcely an important element in human behavior that is not involved -- cultural institutions, religious beliefs, economic arrangements, family organization, sexual practices. In consequence, it is noteworthy that the norm of the small family and the practice of family limitation have been established across a wide range of societies: across religious affiliations, across political ideologies, across industrial and agricultural economies, rich and poor nations, better-educated and poorer-educated societies, and, perhaps just beginning, across the tropical countries as well as the temperate ones.

Let us review what is now going on in the field of family planning.

Bernard Berelson is Vice President
of the Population Council,
New York.

Five Governmental Programs in Family Planning

To begin with, there are now five countries with official governmentally approved and administered programs to implement family planning: India, Pakistan, South Korea, Tunisia, and Turkey (and probably mainland China as well). India was the first country to adopt a national policy of limiting population and, subject to lack of firm knowledge about mainland China, it is the largest country to be working on this problem. India set up Family Planning Boards in the mid-1950's, both in the National Health Ministry and in the states. At the outset, and for some period thereafter, the program consisted of the clinical approach, but it slowly became clear that an extensive, community-aimed effort would be needed to take the program to the people rather than expecting them to come to it. In the last few years, the family planning agency in India has concentrated on setting up the administrative machinery to carry a program to the people by assigning a medical family planning officer and supporting staff at the district level (1 to 2 million population) and organizing a small educational and field staff at the block level (70,000-100,000 population). The present governmental budget for family planning is more than \$5,000,000 a year, or about one cent per capita, but plans for the next five years call for substantially increased expenditures.

In Pakistan, a national program was set up in 1960. The annual budget is also just over one cent per capita, or about 8 percent of the total budget for health. The family planning program to date has consisted of a series of short training courses for medical and paramedical personnel, the addition of family planning services to 1,600 medical units throughout the country, the establishment of a national Research Institute of Family Planning, limited clinical studies of the new methods of contraception, small-scale experimentation with mobile audio-visual vans in areas where there are no medical centers, limited use of the mass media, and three major research studies to provide guidance for the program. Progress is slow, but gradually the institutions and personnel to carry forward a national program are being developed; and the plans for the Third Five-Year Plan, to begin next year, call for a much enlarged budget and an upgrading of positions and personnel. In addition, the newly appointed commissioner of family planning is actively seeking ways to develop an intensive program in Pakistan centered on the newly developed intra-uterine contraceptive device (IUD).

The third Asian country to organize an official national program, South Korea, is much smaller than India or Pakistan -- about 28 to 30 million. Here, the government has given a high priority to family planning, both in national budget (about 4.5 cents per capita) and in call upon other resources. Three full-time family planning workers, nurse-midwives, are employed in every one of the country's 180

health centers. In addition, 1,400 assistant workers have been recruited from village women with elementary education, or one for each subdistrict of 10 to 20,000 population. In the summer of 1964, a special IUD effort was made, and it already appears that this method is highly popular: insertions now number about 60,000 (more than anywhere else in the world) and, for the time being, seem limited only by available medical personnel and governmental subsidies. In my own view, Korea is one of the two or three countries with the best chance to demonstrate for the first time in human history that a deliberate effort to spread voluntary contraception can bring down a national birth rate in a reasonably short period of time.

Tunisia embarked upon this effort only this year, and the program is just getting under way. Already, however, it appears that the demand for family planning is greater than the resources available to satisfy it, but training and organizational work will soon repair the balance.

Finally, in Turkey family planning has been given a prominent place in the current officially approved plan for economic development. A program has been laid out, a director of family planning appointed, a budget accepted, a fertility survey completed, a private family planning association formed, and intensive action awaits only the repeal of an anti-contraception law dating from the difficult days that faced Turkey after World War I. [The law was repealed on April 15, 1965.] The favorable factors are such that here, too, one might expect a highly successful effort in a relatively short time.

In all these countries, I might add, technical assistance has been provided by American private foundations, notably the Ford Foundation and the Population Council. Expert missions have drawn up reports and plans for each of these countries, and American specialists are resident advisors in each of them at this moment.

Unofficial Family Planning Programs

There are a number of other countries that are implementing family planning with governmental support in funds and facilities, but without an official declaration. Most notable in this category, perhaps, is Taiwan. After a highly successful effort in Taichung, a city of 350,000 population, the health officials expanded the program last spring to about 10 percent of the island's population in the more deprived rural and urban areas. Already, after only a matter of months, that program is being expanded again to the entire island of 12,000,000 population. There is careful documentation that the Taichung program brought down the birth rate in that city and there is every indication that the island-wide program will be similarly successful. Here, again, as in Korea, the program is centered on

the newly developed intra-uterine device. And a similar concentration on the IUD is being expedited in Hong Kong through governmental support to the private family planning association, again with more clients than can currently be served.

In several other countries, limited projects are going forward under governmental auspices. In Ceylon, the Swedish government is providing technical assistance. In Thailand, the first fertility survey of knowledge about family planning, attitudes toward it, and actual contraceptive practice has just been completed with American help, and the first action program will get under way this year. The Taiwanese doctor who supervised the Taichung program will be an adviser to the Thai program. In Egypt, a few clinics are offering family planning services under governmental auspices. IUD programs are also being undertaken in various medical installations in Indonesia, Fiji, Malaysia, Chile, Venezuela, Jamaica, Puerto Rico, Nigeria, Ghana, and Southern Rhodesia.

In several of these countries there have been carefully controlled and scientifically measured experiments to determine whether family planning could be implemented, and if so, how it can be done most efficiently. It would be too much to claim that they were all successful, but it is fair, I think, to say that we have learned from all of them. Moreover, a number of so-called fertility surveys have been carried on over the past few years; therefore, we now have a good start toward more or less comparable data on knowledge, attitude, and practice from a large number of countries throughout the world -- Argentina, Brazil, Ceylon, Chile, Costa Rica, Czechoslovakia, Egypt, Ghana, Greece, Hungary, India, Indonesia, Israel, Italy, Jamaica, Japan, Korea, Lebanon, Mexico, Pakistan, Peru, Puerto Rico, San Salvador, Taiwan, Tunisia, Turkey, Uruguay, the United Kingdom, the United States, and Venezuela. To my best knowledge, this is the most substantial set of comparative social data ever collected across such a range of societies, and a few of the pilot projects in family planning are among the most elaborate and extensive social experiments ever carried out in the natural setting.

Lessons from Family Planning to Date

What has been learned from all this experience to guide the continuing effort? Everything is more complicated than my quick review will suggest, and others would summarize the experience differently, but to my mind there are several conclusions that are justified by developments to date. Here are just a few of them:

The straight clinical approach to the spread of family planning does not work well. A much more active program of taking family planning to the people is required.

Substantial proportions of the people want family planning now; contrary to the usual belief, sufficient motivation exists to make a demographic difference if it could be implemented. To be sure, the actual practice of family planning is minimal in the typical developing country, and knowledge about contraception and reproductive physiology is not much better. With regard to attitudes toward family planning, however, the situation is different. Virtually every survey on attitudes toward family planning, from urban America to village India, shows that a large proportion of people say they are favorable to the idea of limiting family size, and especially after the third or fourth child. The figures vary somewhat from one locality to another, but there is an impressive body of favorable responses from India and Pakistan, from Mexico and Peru, from Jamaica and Puerto Rico, from Thailand and Turkey, from the United States and Great Britain. Many people in the world are now persuaded, at least in principle, of the desirability of limiting the birth of children to the number wanted when they are wanted -- and everywhere that means fewer than they now have. Thus, if all couples throughout the world were equally able to realize their own desires on number and timing of children, population growth rates would be substantially lower.

The "ready" people are likely to be of two kinds: those of high socioeconomic status, and particularly high education; and those with three children or more, including sons. Almost by definition there are too few of the former for a sizable effect on the birth rate anywhere in the developing countries, but there are many of the latter. Studies like that in Taiwan are beginning to show that highly educated people will undertake family planning on their own and in the absence of any organized program, but that a program will be able to reach those who already have a number of children.

The character of the contraceptive technology makes a very big difference. Anything that can overcome the need for sustained motivation, repetitive action, and a system for continued supplies is a big step forward. Moreover, the easier and more effective the method, the less the motivation needed to achieve successful family planning. Hence, the intra-uterine device is a great advance.

The indicated strategy for spreading family planning, under most conditions, is to aim at the already highly motivated people on the double ground that that will yield the most return per unit of scarce resources and that the best way to spread motivation is to satisfy the existing motivation. Again, studies like those in Taiwan are showing that word-of-mouth diffusion can be very effective, at least with the new intra-uterine device. A corollary is that action programs should begin in the cities and towns and then move out more or less concentrically from them.

As for cost, it begins to appear that family planning can be implemented economically -- that is, for far less than the strictly economic value of each prevented birth. Family planning has many more values than the economic one, and perhaps more important ones -- social, educational, cultural, political, and personal values -- but in narrowly economic terms, it is clearly justified and almost certainly worthwhile. Indeed, for many developing countries it may be the best investment they can make.

I do not wish to leave the impression that it is an easy task to bring effective family planning to the population of a developing country. In the national and pilot programs under way so far there have inevitably been mistakes, false starts, disappointments, and frustrations -- in short, it sometimes seems, nearly as many errors as trials. Some people take such critical observations and occasional failures as demonstrating the impossibility of doing anything effective about the matter.

But how could it be otherwise on such a problem? Has deliberate effort ever done any better, or as well, on a matter of this scope and character? In less than a decade we have developed a layer of experience, a solid body of knowledge, a number of trained personnel, an improved technology, and a plan of strategic attack to deal with one of the most important problems in the world. Yet we are still near the beginning. And, to this date, for various local reasons, we have nowhere in the world yet witnessed a maximum effort in this field -- an effort, that is, truly commensurate with the task. Under the circumstances, the accomplishments to date seem to me to be an occasion for pride, not disappointment, for hope, not despair, and, looking to the next decade, for great expectations.

WORLD POPULATION CONFERENCE

From August 30 to September 10, 1965, the second World Population Conference will take place in Belgrade, Yugoslavia under the auspices of the United Nations with the cooperation of the International Union for the Scientific Study of Population and of the specialized agencies of the UN. The gathering is "planned as a scientific meeting of experts, designed to improve understanding of population problems, especially as they relate to social and economic development."

Preparations for the Conference began in 1961. A group of 1,250 experts on population issues from many countries were nominated and invited to participate. Some of the topics slated for discussion are: the relation between population and growth, between population and employment, education, food supply, urbanization, housing, natural resources, savings, investment and industrialization; factors affecting fertility; family planning; genetics; factors affecting mortality; aspects of migration; demographic research and training; and new techniques in demography.

Most of the Conference papers, which were prepared and distributed in advance for discussion at the Conference, will be available at some of the UN Information Centres around the world early in 1966. A summary of the proceedings will be available following the Conference. The Conference will also be dealt with in a future issue of the Development Digest.

The present Conference and its predecessor, held in Rome in 1954, are by no means the sole contributions of the UN to studies of population and economic development. The UN's persistent efforts to improve vital statistics have made better comparative demographic studies possible. The Food and Agricultural Organization and the World Health Organization, while not engaging in population planning, have been concerned with demographics as it relates to their efforts to assure the provision of minimal nutritional and health requirements for a growing world population. Following a request from the Government of India, a UN Mission was sent to that country under the Extended Programme of Technical Assistance to advise on the acceleration of the family planning program.

REGIONAL INTEGRATION

In the great majority of developing countries, the process of economic development will require some degree of industrialization. However, the benefits of greater productivity resulting from industrialization cannot be achieved unless the newly established industries can, within a reasonable period of time, produce manufactured goods for as small a real cost in terms of the factors of production as that expended to purchase imported manufactured goods. Otherwise, there is no gain in real income for the economy as a whole.

The efficiency of industrial production depends upon several elements, among the most important of which is the scale of production. All other things being equal, the larger the scale of production, the smaller the unit cost of each item produced. However, most developing countries today have national markets too small to enable them to obtain these economies of scale. Hence, groups of developing countries have been seeking to integrate their small, separate economies into a single market area large enough in terms of purchasing power to give them some of the benefits of large-scale production. Such arrangements could stimulate industrialization, and in addition, by reducing unit costs of production, could make it possible for the member countries to sell manufactured goods abroad at competitive prices.

The development of regional arrangements capable of providing such benefits is neither rapid nor easy. This section focuses on the progress and the problems of those groups of developing countries that have entered into arrangements for regional integration. The section's lead article, by Sidney Dell, deals with many of the problems of regional integration and industrialization, including the thorny question of the distribution of benefits between members at different levels of development. An account of the Central American Common Market, the most successful of these regional arrangements, follows. Next, Miguel Wionczek reviews the development of the Latin American Free Trade Association and analyzes its difficulties. Excerpts from a proposal by four of Latin America's most noted economists advocate transforming LAFTA into a common market. Finally, dealing with questions also raised by Dell, Peter Newman explains steps taken to make the East African common market (created before independent countries had to be consulted) acceptable to all of its members by achieving a more equitable distribution of the benefits.

REGIONAL INTEGRATION AND THE
INDUSTRIALIZATION OF LESS
DEVELOPED COUNTRIES

Sidney Dell

[From "The Viability of Small Countries and Regional Approaches," a paper presented at the Seventh World Conference of the Society for International Development, Washington, D. C. on March 12, 1965. The Conference papers will be published in early 1966 by Oceana Publications, Dobbs Ferry (N. Y.). These remarks also form the basis for a chapter in the author's book, A Latin American Common Market? to be published by the Oxford University Press in May 1966, pp. 384, ca. \$US7.70.]

These are
excerpts
from the
paper.

In a world of superpowers, it has become fashionable to regard the merging of small countries as an end in itself, and nationalism as a luxury fit to be enjoyed only by those able to measure their military strength in nuclear megatons, or those able to acquire such strength. Of 112 underdeveloped countries throughout the world, 91 have populations of under 15 millions and 65 have less than 5 millions, but the population of England in the time of Queen Elizabeth I was also 5 millions or so; and no one has thought of suggesting that the country that defeated the Spanish Armada was not viable. Viability is a relative term.

Sidney Dell is Director of the New York Office of the UN Conference on Trade and Development and was formerly Director of the Research Division of the United Nations Centre for Industrial Development in New York.

The difficulty is that the political nationalism of the small developing countries is at odds with their economic weakness. For a variety of reasons, they are unable to make rapid progress within the existing economic framework based mainly on agriculture. Acceleration of the growth process necessitates industrial development. Indeed, the greater the progress in agriculture, the greater the surplus of labour released by the land to seek productive employment in industry.

Economies of Scale and Barriers to International Trade

Modern industry is large-scale industry and needs a certain minimum scale of operations for peak efficiency. This, in itself, would not matter if there were no barriers to world trade. Switzerland was able to build a viable economy without joining up with any other country. So were Belgium, Norway and Sweden, but these countries took their first steps on the road to development in the days when specialization was possible because of relatively easy access to world markets. Switzerland could specialize in watches, Belgium in steel, Norway in shipping.

Today, the barriers to trade make it impossible for the newly emerging countries to take the risk of specialization. Specialization means vulnerability, and these countries are all too vulnerable already. Few of them, in establishing manufacturing industries at the present time, could count on significant export markets. Markets in the industrial countries are closed to them partly because, by now, the technological lag is so great that, even though wages in underdeveloped countries are much lower, total costs per unit of output are generally higher because of such factors as low productivity of labour, lack of complementary facilities, or high costs of raw materials, power or transport. Moreover, wherever this is not so, the industrial countries take steps to protect themselves against so-called unfair competition. On the other hand, markets in other underdeveloped countries are also closed to them. Where other underdeveloped countries have competing industries of their own, they have generally protected them in the home market up to the hilt. Where they do not have competing industries of their own, they would rather buy low-cost imports from North America and Western Europe than high-cost imports from their neighbours.

While the importance of economies of scale is sometimes exaggerated, it seems clear that the national markets of most of the smaller developing countries are too restricted to provide an adequate volume of demand for mass production industries. The greater the number of different industrial products or varieties that any one country attempts to manufacture and the more its industries are limited to production for the home market alone, the lower its productivity is likely to be. Where productivity is low and costs high, the tendency

is, for industry to seek, and obtain, correspondingly high protection. Yet if each industry in each country is separately entitled to the amount of protection it requires to survive while operating under conditions of low output and high costs, the tendency to regional specialization is necessarily inhibited, and protected inefficiency within small self-contained markets becomes the rule.

The Case for Regional Integration

Because of the failure of economic nationalism to provide a satisfactory solution for the problems of small countries, we are now witnessing a number of experiments in combining political nationalism with economic regionalism. The first thing people think of, not unnaturally, is lowering the barriers to regional trade. It is, of course, common ground among economists that protection may be a necessary condition for economic development at the national level. The question that now arises, however, is whether group protection offers any advantages over national protection in stimulating the rate of growth. Those who favour regional groupings of developing countries do so because they see great advantages in securing, for the agricultural and industrial producers of each country, protected access to a region-wide market, instead of their being confined within the limitations of narrow national markets. Protected access is secured by the lowering of internal barriers to trade at the same time as the outer ring of tariff and quota restrictions on imports from the rest of the world is maintained and perhaps even reinforced.

Such protected access would, it is thought, make it possible a) for countries to use their existing agricultural and industrial capacities more fully in supplying one another's needs, b) for new investment to take place in industries that would not be viable if confined to individual national markets, c) for both old and new industries to reduce costs by benefiting from the economies of scale and specialization. In some cases, this might help the industries concerned in the process of becoming fully competitive in world markets, including the markets of developed countries. Stated in its simplest terms, the case for regional groupings of developing countries is that future economic growth presupposes a large amount of industrial development and that such development would be facilitated if the barriers to trade within each region could be reduced or eliminated.

Reciprocal Benefits

A major difficulty facing the developing countries, however, is that the release of market forces through the reduction of regional trade barriers cannot be relied upon to bring about comparable rates of development for all countries. In the past, the free market system developed the world unevenly, concentrating industry and technical

progress in limited areas of the globe. And just as, in the past, world-wide free trade led to great and growing inequality between continents, so now would intra-regional free trade be in danger of leading to or intensifying corresponding inequality between countries. Yet, if the cohesiveness of a regional trading arrangement is to be maintained or strengthened, it is 1) vital that all participating countries should gain from the arrangement more than they could have gained without it, and 2) highly desirable that any inequality in gains by various member countries should be held within reasonably narrow limits.

This does not mean, of course, that a sound development policy inevitably requires the equalization of growth rates throughout the area considered. It may well be that, for any area regarded as a single unit, the most efficient way of developing may lie through deliberately unequal rates of growth in various districts and an intentional concentration of effort in the richer and more advanced regions. This may apply particularly where one starts from a very low level of development and encounters major indivisibilities, especially in outlays for social overhead investment.

Such a policy can, however, apply only to politically unified areas. It is not likely to be politically acceptable in an economic union, which cannot be regarded as a single unit for all purposes. Any one government can adopt policies which, while beneficial for the country as a whole -- and leading to ultimate advancement for every part of the country -- nevertheless leave particular areas within the country behind, at any rate, in the short run. But, no government could possibly defend itself before its people if it allowed its own national interests to be submerged and compromised by the policies of the economic union of which it was a member, even where such policies were of demonstrable advantage to all other members of the union. Thus, an economic union must study the interests of its constituent parts to an extent not required of a unified country. Where such a union is formed in the absence of strong federal loyalties among the mass of the people, the individual countries are likely to try to limit, as far as they can, the extent of any damage to their national interests caused by a powerful, and perhaps zealous central authority. In short, balanced and harmonious development of any group of countries is indispensable if the loyalty of all members to the group is to be maintained. And harmonious development can, in turn, be ensured only through concerted planning efforts based on agreement among the participating countries.

Automatic Tariff Cutting?

The present crisis in the Latin American Free Trade Association has been attributed by some observers to the cumbersome process whereby annual negotiations are required for bringing about reductions in trade barriers. EEC and EFTA have achieved major successes with

across-the-board methods of tariff reduction in accordance with a pre-determined and automatic schedule, and these are examples to which some observers believe that the Latin American Free Trade Association should conform.

One can readily agree that automaticity, if attainable, would lead to more rapid tariff disarmament in LAFTA; this is too obvious to need labouring. But, to stress automaticity as the answer to current difficulties is to mistake form for substance. The problem is precisely that governments do not want automaticity, and that the underlying political will and sense of common purpose needed for the application of automatic methods are still lacking in Latin America.

For one thing, automatic methods can be applied only where there is a presumption that such methods will lead to comparable benefits for all countries. While the Western European countries are sufficiently close to one another in levels of per capita income and production for such a presumption to provide a workable basis for action, the same cannot be said for Latin America or for other underdeveloped areas. The adoption of automatic methods in any grouping of underdeveloped countries, coupled with reliance on the spontaneous reaction of market forces to changes in tariff and quota restrictions, would be likely to benefit the strong as against the weak, and the industrially more advanced as against the industrially less developed.

As a matter of fact, even in Western Europe, the process of automatic dismantling of tariffs is likely to continue to its final goal only if other steps, of a nonautomatic character, are taken. Highlighting this fact was the warning issued on October 21, 1964, that France would withdraw from the EEC if the agricultural market were not organized in the way that had been agreed. The agreement on a common price for grain that was reached two months later was thus an indispensable prerequisite for the continuation of the EEC tariff reduction programme, despite the so-called automaticity of that programme.

Now the problems of agriculture in Western Europe have this much in common with the general problems of both agriculture and industry in underdeveloped areas -- that they cannot be solved exclusively through automatic arrangements operating alongside market forces. The modernization of agriculture in Western Europe is to be handled with direct support from governments and the same goes for economic development generally in the underdeveloped areas. In both cases, the need is for national and regional planning for the most effective utilization of resources in meeting future demands.

The fact is that the simple process of liberating market forces within a regional framework of free trade cannot be relied upon, in less developed countries, as a means of generating new investment

in industry or of providing the networks of transport and communications and other elements of infrastructure that a thriving regional economy demands. What is needed is a much more deliberate inter-governmental promotion and stimulation of growth, with an equitable distribution of benefits throughout the region. Adequate joint planning arrangements are indispensable if a programme along these lines is to be realized.

Regional Plan Coordination

The real question in Latin America and in other underdeveloped regions, therefore, is this. Have the peoples and their governments reached the stage at which they are prepared to undertake both national and cooperative planning of their economic development? Are they ready to plan their own national development? And assuming that they are, will they be prepared to try to dovetail their national plans with those of other countries so as to achieve consistent overall targets for the region as a whole?

Assuming that the answers to these questions are in the affirmative, the next problem is how to secure a coordinated programme of industrial development providing adequate advancement for each of the member countries of a regional grouping. It must be admitted that one cannot point to much experience of successful intercountry joint planning. Pioneer attempts to regulate industrial development on a region-wide basis in Central America and East Africa have not thus far yielded particularly encouraging results, even though in other respects, the Central American integration programme has been quite successful. Joint planning among members of the European Economic Community has thus far been frustrated by opposition to the concept of planning as such. Even the countries of Eastern Europe have faced immense difficulties in coordinating their national plans of development.

Despite the limited success thus far of the programme for coordinated industrial development in Central America, it may well be that certain features of this programme do hold a key to the solution of the problem. The original intention of the programme was that agreement would be reached among the five member countries on the distribution among them of new industries requiring access to the combined market of the whole area. These new industries were called "integration industries." Once the agreed-upon "integration industries" were set up, they were to enjoy the benefits of free trade within the region. Any other plants in the same industry not qualifying for "integration" status would benefit only from annual reductions of 10 percent in the import duties applied to their products; this implied, however, that they likewise would gain free entry to the whole regional market at the end of ten years from the date specified in the protocol establishing the "integration plant." Thus, the preferential treatment given to the

designated "integration plants" was to be strictly limited in duration.

A system basically similar to the Central American system was agreed to at ministerial level between Kenya, Tanganyika and Uganda in April 1964, at Kampala. The ministers agreed that certain industries should be scheduled under the Territorial Industrial Licensing Acts, and a declaration was made in favour of an exclusive license to a firm operating in the agreed territory.

An Assessment of the Planned Distribution of Industry

Two main arguments have been advanced against any programme of intergovernmental agreements on the distribution of industry: that it would interfere with the optimum location of industry, and that it would encourage monopoly.

On the one hand, it is contended that strictly industrial considerations based on the principle of comparative advantage would cause new factories to be located in regions providing the best combination of transport and power facilities, trained labour and ample raw materials and intermediate products. The licensing of industry approach, on the other hand, would retard industrial efficiency insofar as new plants had to be located in countries or areas that were less suitable than the best sites available.

The weakness of this argument lies in the static concept of the principle of comparative advantage that is implied. If, indeed, this static point of view were pressed to its logical conclusion, one would have to say that most of the new plants probably should not be placed anywhere in the less developed areas, but rather in North America or Western Europe. If, on the other hand, the principle of comparative advantage is reinterpreted within a dynamic framework, there is every reason to expect that even those countries that are industrially least developed at the present time will be operating viable industries in the long run.

It is also apparent that concentration of new industries in only one or two countries of a regional grouping would quickly cause the grouping to break up for lack of any incentive to the less-favoured countries to stay in. In the case of Central America, for example, there is no reason why Honduras should agree to import manufactured goods from El Salvador or Guatemala at prices higher than those at which it could buy them from the United States, unless El Salvador and Guatemala are, in turn, prepared to take manufactures from Honduras. Industrial development is just as indispensable an ingredient in the solution of the economic problems of Honduras as it is in the advancement of El Salvador and Guatemala. The same considerations have prompted

Tanganyika and Uganda to ensure that they obtain their fair share of the overall industrial development of the East African Common Market, where free market forces operating without restraint would tend to locate most industry in Kenya.

A much more significant objection to intergovernmental licensing of industry is that it might tend to create regional monopolies, and it is probably this consideration that has been most influential in the reluctance of national and international financing agencies to aid this approach. Even if economies of scale were achieved by setting up only one plant catering to the whole of the Central American or East African region, what reason is there to believe that the benefits would be passed on to the consumer in the form of lower prices? Might not monopoly profits simply generate additional demand for luxury imports?

It should first be noted that the general assumption that a single-firm situation is invariably bad, and a multi-firm situation is invariably good is not as clearly established in fact as some have supposed. One firm may dominate a market and yet be very go-ahead in discovering and applying new techniques; and in another market there may be a competitive battle so intense that no resources are devoted to research and development. Quite commonly, in underdeveloped as in developed countries, where there is more than one producer in an industry, the various companies get together and reach understandings about their respective shares of the local market; and the stalemate brought about by such understandings may be even more inimical to technical progress and dynamism than monopoly would be. Thus, a doctrinaire approach to the problem of monopoly and competition is not likely to prove even relevant, let alone successful.

At the same time, there is no doubt that the creation of new monopolies in groupings of underdeveloped countries could have an adverse effect upon their economies: it was for this reason that the Central American Agreement on Integration Industries provided for the protection of consumers by various means, including the establishment of an intergovernmental commission to supervise the programme. The way was left open for the stipulation of quality standards and possibly even the regulation of prices. Moreover, the special advantages available to the designated integration industries were to be progressively reduced year by year, and eliminated within ten years, as noted earlier.

In the industrially advanced countries, the answer to this problem has been sought in the public regulation of monopoly, and this may be one of the best ways of approaching the matter. The public interest can always be safeguarded, in the last resort, through the degree of protection afforded to local monopolies against competition from abroad. In other words, the government can always force the hand of a recalcitrant monopoly by lowering import duties.

In any case, if there are profitable business opportunities, failure to act along the lines of the "integration industry" approach will not necessarily prevent the creation of monopolies. It may merely leave the field open for foreign companies to set up the monopolies in question, and it would obviously be more difficult for underdeveloped countries to control foreign-owned monopolies than those domestically owned.

For these reasons, there appears to be a strong case for the joint planning of industrial development by groupings of small underdeveloped countries employing some form of agreed distribution of industry policy on a regional basis.

Need to Apply Economic Criteria

It should, perhaps, be emphasized that no distribution of industry policy can be based on a purely political decision. Any such policy would be bound to run into difficulties if it did not take account of all relevant economic considerations. While due allowance must be made for the fact that the current money costs of establishing new industries in less developed regions may be much higher than the social costs, there must be a reasonable expectation that, in the long run, any industry established will be able to stand on its own feet without special subsidy or support. The economic and technical basis for intergovernmental agreements on industrial location should, therefore, be as solid as modern methods of analysis can make it. If industries are to be sited in locations that are less than optimal, it is essential to know what additional costs will be incurred thereby, and how long it will take for them to become fully competitive. Once these facts are known, informed decisions can be taken at the political level. Such decisions should not, however, be left simply to the pull and push of political pressure, although it would be naive to imagine that such pressure can be altogether avoided.

There are, perhaps, grounds for a certain optimism regarding the long-run prospects of industries located even in the least advanced regions. The advance of modern technology is constantly reducing the relative importance of natural advantages in the location of manufacturing industries. Provided that the necessary skills can be learned and infrastructure provided, as they obviously can and will be, there is no reason why even the countries that are least industrialized today should not look forward to a high level of industrial development in the future.

Integration's Political and Institutional Needs

It will not, however, be easy to decide how to balance present facts against future prospects. There will always be room for honest differences of opinion as to the long-run prospects for particular

industries in particular countries, especially since the tools that we have in hand for evaluating such prospects are far from perfect or ideally suited to their purpose. Moreover, there are bound to be instances of diverging as well as of converging national interests. Where such basic questions of national economic interest are involved, there is an obvious need for effective institutional arrangements whereby various national interests can be harmonized. Anything in the nature of joint planning and joint development is bound to call for the creation of fairly powerful institutions able to provide for consultation, conciliation and policy making.

Experience in Latin America shows that a regional grouping quickly comes up against all kinds of problems calling for solutions at the highest political level. Unless there is machinery for ensuring that problems can, in fact, be discussed and solved at that level, the process of integration begins to face a growing log-jam of undecided issues. The present crisis in the Latin American Free Trade Association is not only due to problems inherently difficult in themselves. It is due also to the weakness of the institutional arrangements for dealing with those problems. The fact is that the institutions created by the Treaty of Montevideo were never intended to provide a dynamic centre of decision making for the LAFTA area as a whole.

The central organs of the Latin American Free Trade Association, as established under the Montevideo Treaty, have much more in common with those of the European Free Trade Association than with those of the European Economic Community. The analogy is a significant one. The European Free Trade Association is primarily a mutual tariff-cutting association, whereas the European Economic Community has the much more far-reaching objectives of economic and, ultimately, political integration. LAFTA institutions, like those of EFTA, were originally conceived as simply supervising the reduction of trade barriers.

It was not long, however, before countries began to realize that tariff cutting would not take Latin America very far. The need for the harmonization of the economic policies of LAFTA members and for jointly planning the integrated development of the LAFTA area became increasingly evident. With it came the recognition that, if governments were to agree on significant adjustments to national policies and programmes in the interests of regional integration, the issues would have to be explored carefully at the working level, and then presented for decision at the highest political level.

One possible solution would be to take a leaf out of the European Economic Community book and provide for the creation of a strong Council of Ministers, and an executive on the lines of the EEC Commission. Here, however, we come back to the question of political

nationalism. Are such institutions, with their supra-national overtones, compatible with the long-run independence of the member countries, or is it a necessary condition of establishing such institutions that the countries concerned be prepared ultimately to envisage political as well as economic union? Experience to date does not provide us with a clear answer to this question, and I am therefore content to leave it in your hands.

THE CENTRAL AMERICAN COMMON MARKET

[From Latin American Business Highlights,
The Chase Manhattan Bank, New York,
Volume XV, Number 2, Second Quarter 1965,
no charge, pp. 3-8.]

These are
excerpts
from the
article.

On the isthmus linking North and South America, five nations have banded together to improve their economic well-being. This is the fifth year of operations of the Central American Common Market (CACM) and the member countries of Costa Rica, El Salvador, Guatemala, Honduras and Nicaragua have each benefited from the association. The area is one of the fastest growing in Latin America and the underdeveloped world in general.

There is a tendency to compare developments in the CACM with those of the six-member European Economic Community (EEC). Indeed, both are concerned with establishing a uniform tariff against outsiders, freeing trade between members, and achieving a more efficient structure of production within their areas. In both, markets have grown at a substantial rate since their formal inceptions. However, this similarity should not be overstressed, since there are important differences between the two areas. The members of the EEC already had developed economies before the common market was established, while the CACM was, and still is, an underdeveloped region. The EEC has a more diversified industrial and agricultural structure, a more complex foreign trade pattern, and higher levels of savings and investments. In addition, its transportation and communication networks, both between members and with the outside world, are highly advanced.

. These differences mean that the problems of economic integration faced by the CACM are much more difficult. The EEC is attempting to rationalize the existing productive structure by diverting industry and agriculture to the more efficient areas, by encouraging capital to go where returns are greatest, and by promoting the movement of labor where its skills are needed. The CACM is faced with these formidable problems, plus the basic tasks of developing new fields of industrial and agricultural activity, of eliminating practices which hinder the expansion of output, of accumulating capital from existing low income levels and using it productively, and of training a rapidly expanding population with the skills needed by a developing economy.

Moreover, the EEC members are encouraged to grant various concessions to one another by the belief and hope that some form of political union will result from a successful economic union. In the CACM, members are wholly concerned with forming a viable economic association. This could make negotiation most difficult on matters such as a common monetary and fiscal policy, which is a necessary condition for a successful common market. Sustained inflation in one member country could seriously hamper any payments or clearing agreement that CACM reaches and could affect the free flow of trade between members. Different tax structures could affect the intra-area flow of capital and labor.

Other problems facing the CACM include the location of various industries, the prevention of the concentration of investments in the most developed areas, and the reduction of tariffs on the few remaining -- but politically important -- items.

Agricultural Production and Diversification

A recent meeting of the Central American ministers of agriculture noted the considerable progress in the area's farm production during the past ten years. Important examples cited were the emergence of cotton and meat as important export commodities, as well as the promising outlook for such items as chicle, rubber, and tobacco. However, the delegates were also conscious of deficiencies in the agricultural sector. The output of basic food crops is still characterized by low yields and an inefficient marketing system. Although the area has the potential for self-sufficiency in these items, it will need to import significant quantities of grains for some time to come.

The ministers made several proposals for the development of sound regionally coordinated plans to improve output of the basic crops as well as to continue their diversification program. These proposals included free movement of agricultural labor throughout the area, a common policy on export commodities, areawide free trade in food grains, and greatly expanded grain storage facilities.

Tariff Reductions

Since the General Treaty of Economic Integration was signed in 1960, the member countries have eliminated 95 percent of internal customs duties on products originating in the area, and have imposed a common external tariff on about 98 percent of the items in the regional customs classification. While the adjustments to a unified market are proceeding very well, the market will not be really unified until about 1970 when a common customs administration is adopted. At this point, a single regional market will replace the five separate national ones. Customs duties will no longer be collected each time a third-country commodity crosses a CACM member's border.

However, negotiating internal trade reductions has proved to be a problem on the few remaining items, such as dairy products, coffee, and petroleum and petroleum products. These are mostly industries which have already been built up in the area and on which, therefore, trade concessions are difficult for the individual countries because of vested interests. Still, these difficulties can be worked out, as illustrated by the recent textile compromise.

With rising per capita incomes and expanding markets, the textile industry in Central America has a good potential. It has already been built up locally to some extent and, with domestic cotton production increasing, the industry is undergoing expansion and modernization. Still, many plants need to import textile raw materials, and divergencies in government policies created serious difficulties. For example, the competitive position of some firms was impaired by the wide differences existing in tariffs on imports of textile materials, with special privileges given to particular firms in individual countries.

For some time it seemed as if no agreement would be reached, and intratrade in textile materials would be seriously hampered. The solution to the problem was finally reached by a plan to progressively narrow the wide margin between the tariffs of the different countries. A common external tariff for textiles is planned within five years. In the meantime, certain restricted benefits can be granted to firms by their governments under individual industrial promotion schemes.

This determination to keep the CACM moving will be an example to follow as the member countries continue their efforts to achieve equitable progress.

Allocation of Development Expenditures

Another major problem, in this as in any such unified market, has been that of sharing of investment funds: in other words, how to

prevent the already more developed countries of the region from getting an excessive amount of the funds available for development. This problem was originally intended to be handled by the Regime for Central American Industries, but this has never worked smoothly. The most recent attempt to handle development funds has been to put them under the auspices of the Central American Bank for Economic Integration (CABEI).

The CABEI, inaugurated in May of 1961, is the main regional financing organ of the CACM. It is designed to promote the balanced economic development of the member countries and to act as liaison for both private and public sectors in dealing with domestic and foreign capital sources. The CABEI, with paid-in capital of \$20 million by the member countries and with another \$30 million from various sources such as the Inter-American Development Bank and the Agency for International Development, had granted credits of over \$26 million by end-1964.

Last spring, an Investment Development Department was organized under the CABEI to encourage private initiative and to promote the establishment and expansion of Central American enterprises. Under this Department, the CABEI has established a permanent committee in each of the member countries to coordinate national development plans, evaluate investment proposals and opportunities, and act as a liaison between investors and businessmen.

Monetary Union

A major goal of the CACM is to achieve a full monetary union. The Central American Bank for Economic Integration is already settling local accounts in the area's new accounting currency, the Central American peso -- at par with the US dollar. This is regarded as a first step toward a monetary union. Of course, the feasibility of all the countries' changing to a common currency depends on their having relatively stable prices. While the area has had an impressive record of price stability for years, lately inflationary pressures have appeared in Costa Rica and Honduras. This development could seriously affect the monetary union movement.

But the market, anticipating such a problem, has established a Coordinating Committee for Market and Price Stability. If the same determination is shown as in the case of the textile agreement, the committee working with the CABEI can promote the necessary monetary and fiscal policies to bring the relative price changes of the countries more into line.

Tourist Industry

The Central American Bank has also been undertaking studies aimed at developing the tourist trade in the area. Traditionally, the area has had only negligible tourism. Last year for example, US tourists and visiting businessmen spent only an estimated \$14 million there, versus \$11 million in 1963. But with the Pan-American Highway now completed and with the area's numerous attractions, the industry could improve. However, growth will take time as there is a serious lack of facilities for visitors and these cannot be built rapidly.

Favorable Developments in 1964

With the exception of Costa Rica, last year all the members of the CACM had estimates of real GNP growth ranging from 6 percent to 9 percent. In Costa Rica, continued volcanic activity was a factor limiting the GNP growth rate to an estimated 3 percent. In the area as a whole, during 1964, there was substantial investor interest, mounting foreign trade, as well as expanding intra-CACM trade.

Total worldwide CACM trade estimates for last year show a 20 percent increase for both exports and imports to \$700 million and \$772 million, respectively. Private and official capital inflows covered the trade gap. Intra-CACM imports, estimated at \$90 million, show a 34 percent increase. While the area's export trade still depends on the traditional agricultural crops, intratrade is about 40 percent in manufactured goods and 30 percent in food products.

Much of last year's prosperity was based on the record export of agricultural commodities as well as high world prices for them. Economic growth is still determined largely by developments in the three staples -- coffee, bananas, and cotton -- but good progress is being made in diversification.

This is seen by the fact that the share in exports of these three crops dropped from 77 percent in 1960 to 60 percent by 1963. Further, in spite of the good increase in sales of cotton and coffee last year, preliminary estimates indicate a continuing decrease in the proportion of trade in these products -- since a bigger increase occurred in exports of sugar, beef, chicle, as well as in manufactured and processed goods.

This year, coffee production is expected to be down by approximately 9 percent from last season's output of about 5.65 million bags. The rise in cotton production, centered in El Salvador, Guatemala, and Nicaragua, has been a major development in the area. During the four years the CACM has been in existence, acreage planted has increased by 71 percent and production by 87 percent. Estimates are

for a continued significant increase in cotton acreage for 1965 and 1966, with some slowdown in growth thereafter. During 1964, areawide exports from cotton came to an estimated \$120 million, compared to \$36 million in 1960. Over half go to Japan, with West Germany taking another 10 percent. The area's banana exports, which go mainly to the US, have risen slowly in the past few years, due mainly to disease and adverse weather. Sugar quota increases by the US have been of great benefit to the area, and expansion of the production of sugar for export has helped to lessen the area's dependence on coffee and bananas for most of its foreign exchange.

The Outlook

The CACM is no longer in the experimental stage, but now has four years of solid growth to its credit. With these achievements, the area should be able to look forward to continuing growth, but there will also be difficult times ahead. Intratrade agreements on the few remaining items will get tougher. Growth in intratrade is likely to proceed less rapidly because most of the commodities which were available for intratrade are already being exchanged, and further growth will occur only as the results of integration and industrialization become effective. Imports are likely to increase more than exports as the countries need more capital and industrial goods. Finally, common monetary and fiscal policies will have to be worked out.

LATIN AMERICAN FREE TRADE ASSOCIATION

Miguel S. Wionczek

[From International Conciliation,
Carnegie Endowment for International
Peace, Number 551, January 1965,
79 pp., US\$0.50.]

These are
excerpts
from the
monograph.

Among attempts to integrate the economies of a group of developing countries, the Latin American Free Trade Association (LAFTA) is probably the most ambitious experiment in terms of geographical coverage and long-term objectives. LAFTA was established by the Montevideo Treaty in February 1960 and today includes Argentina, Brazil, Chile, Colombia, Ecuador, Mexico, Paraguay, Peru, and Uruguay. Together, these countries account for more than 80 percent of Latin America's population and output of goods and services.

Although LAFTA was preceded by two earlier economic integration programs in less developed areas -- the East African common market, functioning since the early twenties, and the Central American common market, created in the late fifties -- it stands out as a first attempt to establish a continent-wide institutional basis for economic cooperation among countries that share common political histories and cultural values and that have similar productive structures. Almost five years have passed since the beginning of this regional cooperation experiment, yet very little is known outside the area about its advances or its problems.

Miguel S. Wionczek is Head of the
Information Department of the
Center for Latin American Monetary
Studies (CEMLA), Mexico City.

The Montevideo Treaty

The Montevideo Treaty, which entered into force in mid-1961, embodies not only provisions for gradual trade liberalization within the LAFTA area, but also the outline of a more ambitious regional economic integration program.

The trade liberalization program is to be achieved through periodic negotiations establishing (a) national schedules specifying annual concessions which each country is to grant to the others; and (b) a common schedule listing the products on which the Contracting Parties collectively agree to eliminate, in no more than twelve years, all duties, charges, and other restrictions on "imports of goods originating in the territory of any Contracting Party." For the purposes of the Treaty, "duties and charges" mean customs duties and any other charges of equivalent effect.

Each Contracting Party is committed to grant to other members of LAFTA annual reductions in duties and charges amounting to not less than 8 percent of the weighted average applicable to third countries. The common schedule is to constitute, in terms of the aggregate value of trade among the member countries, 25 percent of such trade after the first three years, 50 percent after six years, 75 percent after nine years, and "substantially all of such trade" at the end of the twelve-year period. Concessions on products appearing only in the national schedules may be withdrawn by negotiation among the Contracting Parties in return for adequate compensation; the listing of products in the common schedule, however, is final and irrevocable.

The weighted average approach to tariff reduction gives the Contracting Parties some freedom of action in subsequent negotiations, thus ensuring a gradual adaptation of national productive structure to the trade liberalization program. Any country seeking to protect one of its domestic industries for a certain transitional period may grant limited concessions to products of competing industries within the area if it compensates by extending more substantial concessions to other products in order to reach the required annual average.

The percentages governing the gradual expansion of the national and common schedules "shall be calculated on the basis of the average annual value of the trade during the three years preceding the year in which each negotiation is effected."

During the negotiations prior to the signature of the Treaty, the concept of "reciprocity of concessions" was drastically revised and the concept of balancing each member country's trade with the rest of the free trade area was dropped. Instead, "reciprocity" is defined as "the expected growth in the flow of trade between each Contracting

Party and the others as a whole, in the products included in the liberalization program and those which may subsequently be added." However, if concessions result in significant and persistent disadvantages, the members concerned shall, says the Treaty somewhat vaguely, "consider steps to remedy these disadvantages with a view to the adoption of suitable, nonrestrictive measures designed to promote trade at the highest possible levels."

Safeguard clauses do not apply to goods included in the common schedule. Although temporary import restrictions can be applied to them under specific circumstances, these products are not subject to subsequent renegotiation.

Reflecting the ideas expressed in 1959 by the UN Economic Commission for Latin America (ECLA) Working Group in connection with the common market scheme, the Montevideo Treaty envisages exceptions for agriculture and special treatment for the less developed member countries. The Treaty states that member countries "shall seek to coordinate their agricultural development and agricultural commodity trade policies with a view to securing the most efficient utilization of their natural resources, raising the standard of living of the rural population, and guaranteeing normal supplies to consumers, without disorganizing the regular productive activities of each Contracting Party." Before the establishment of the free trade area, however, member countries may limit their imports of agricultural commodities to the amount required to meet the deficit in internal production, giving priority "under normal competitive conditions" to products originating in the area and attempting to expand such intra-regional commercial exchange.

To facilitate economic growth in the less developed member countries, the Treaty offers (a) unilateral concessions to be granted by any of the more advanced LAFTA members "to encourage the introduction or expansion of specific productive activities"; (b) implementation of the trade liberalization program "under more favourable conditions, specially agreed upon"; (c) special nondiscriminatory measures aimed at the protection of domestic industries in the less developed countries, whether for balance-of-payments reasons or for the purpose of lending temporary encouragement to economic development; and (d) collective arrangements for financial and technical assistance to be extended by LAFTA countries as a whole or by any group of them.

Chapter III of the Treaty, which contains certain provisions for "expansion of trade and economic complementarity" is designed to create the necessary conditions for broader regional economic integration in the future. Here the Contracting Parties commit themselves to facilitate "increasing integration and complementarity" of their economies and to make "every effort... to reconcile their import

and export regimes, as well as the treatment they accord to capital, goods and services from outside the Area."

Finally, the Montevideo Treaty establishes two LAFTA organs: a Conference of the Contracting Parties and a Standing Executive Committee. In the Conference, each LAFTA member has veto power over all substantive questions. The Executive Committee is the permanent organ of the Association responsible for supervising the implementation of the provisions of the present Treaty.

Even a casual student of the Treaty cannot fail to notice a certain disproportion between the section dealing with the establishment of the free trade area and the section on "expansion of trade and economic complementarity." The Treaty's main operative section established a fairly modest mechanism requiring a slow and gradual expansion of intraregional trade with emphasis on existing trade. The scope of the Treaty was closely circumscribed by special provisions for agriculture, escape clauses, and the possibility of renegotiating the composition of national schedules in the light of experience.

However, LAFTA clearly was meant to be a major vehicle for regional economic cooperation and integration. This was not only the intent of its sponsors and authors, but the interpretation of the majority of Latin American economists as well. Clearly the Montevideo Treaty, in spirit if not in letter, sought to establish something much less ambitious than a common market but potentially larger than a free trade zone. Consequently, the first three annual sessions of the Conference were largely dedicated to arriving at a more rigorous definition of the commitments of LAFTA members in areas other than trade liberalization. Matters such as coordination of industrial policies, the reconciliation of different foreign trade policies (varying both in objectives and in technical details), and the implementation of "economic complementarity" objectives received special attention.

In 1961, the Montevideo Treaty was the best possible compromise on the diverse positions of the negotiating governments. Its signatories were without previous experience in the field of regional economic cooperation and were unwilling to accept irrevocable commitments that, in the short run, might have harmed many domestic and foreign vested interests. The Treaty probably would have been somewhat stronger if it had received support from outside the area, but in 1959-60, such support was not forthcoming.

In any review of LAFTA's achievements and shortcomings, one can somewhat optimistically assume that the Association will "muddle through," despite periodic crises, for at least two reasons: no combination of anti-integration forces can afford to fight LAFTA openly, and no Latin American government that is a member of the program

can withdraw from it without very serious domestic political consequences. Most, if not all, criticisms have been directed either against the unequal distribution of trade liberalization benefits or against the slow progress in nontrade fields. No important group in Latin America -- governmental or private -- has questioned the validity of the integration program itself.

Intraregional Trade

Intraregional trade among the nine members of LAFTA has increased considerably, in absolute terms, during the past four years. LAFTA supporters assert that, without the Montevideo Treaty, the volume of intra-Latin American trade would have continued to decline. Critical observers point out, however, that only in 1964 will the total commercial exchange among LAFTA members reach the level registered a decade ago. They maintain that intra-LAFTA trade has barely recovered from the stagnation of the past decade and does not yet represent a dynamic factor in the regional economy.

Total Value of Trade Among the Present Members of LAFTA
(millions of dollars)

	<u>1953</u>	<u>1958</u>	<u>1963</u>
Argentina	408.5	294.3	287.4
Brazil	318.2	249.9	239.9
Colombia	19.6	10.1	27.4
Chile	129.2	79.8	169.3
Ecuador	10.8	10.1	11.8
Mexico	4.7	7.3	36.9
Paraguay	19.3	23.0	20.1
Peru	68.5	59.1	111.1
Uruguay	55.2	43.8	46.8
Total	1,034.0	777.4	950.7

If comparisons are made between the figures corresponding to the immediate pre-LAFTA period and 1963, the situation looks more promising. The value of intrazonal trade had increased by 269 percent over the 1959-61 average level for Mexico, 111 percent for Colombia, 75

percent for Peru, 51 percent for Chile, and 37 percent for Brazil. This dynamism was notably absent in Argentina, and in Ecuador and Paraguay -- the two least developed members of LAFTA.

Overall increases in the value of LAFTA trade in the past few years have not, however, affected the traditional balance of trade among the member countries. Thus, Argentina, Mexico, and Ecuador continue to be LAFTA creditors while Brazil, Chile, Colombia, and Uruguay are still net importers.

The data strongly suggest that the bulk of the commodity flows within the area consists of the traditional exchange of foodstuffs and other primary commodities. Tariff concessions extended multilaterally in the first three rounds of LAFTA negotiations had a very limited effect on the composition and direction of trade of member countries, except perhaps in the cases of the two most dynamic Latin American economies -- Mexico and Peru. LAFTA Secretariat statistics show that, at least until the end of 1962, new products, particularly manufactures, were a negligible element in LAFTA's total commercial exchange. In 1957-58, ten commodities (wheat, timber, livestock on hoof, coffee, cotton, sugar, maté, fresh fruit, mineral oils, and copper), exchanged principally among the southernmost republics, represented slightly over 70 percent of the trade flows among the future signatories of the Montevideo Treaty. In 1960-62, the same ten commodities still accounted for 60 percent of the intrazonal trade, and in 1963, according to some independent estimates, only 5 percent of intra-LAFTA trade consisted of manufactured goods.

Some LAFTA members, principally Mexico, insist that the slow growth of new trade is attributable to a lack of awareness among Latin American industrialists of the importance of exports, rather than to the limited scope of the 1961-63 tariff reductions. It is probably more correct, however, to blame the relatively poor results on the mechanism of tariff negotiations, on the low margin of preference negotiated, and on the unwillingness of the Contracting Parties to include in the tariff liberalization schedules most industrial products, whether now manufactured or expected to be manufactured in major LAFTA countries.

The first two rounds of negotiations in 1961 and 1962 were relatively easy, and the minimum liberalization commitments stipulated by the Montevideo Treaty were rapidly surpassed through tariff reductions on traditional trade. Difficulties that began to arise in 1963 emerged with full force in 1964 during lengthy negotiations over the first common schedule, which, according to the Treaty, was to cover 25 percent of zonal trade. At the root of these difficulties were the product-by-product method of negotiation, the absence of quantitative targets for the reduction and elimination of tariffs on broad commodity

groups within specific time limits, and provisions permitting member countries to withdraw negotiated tariff concessions not yet on the consolidated common schedule.

That the participating countries make excessive use of all open and hidden escape clauses during annual tariff negotiations is now freely admitted by LAFTA experts in Montevideo. A background document presented to the Special Commission by the LAFTA Secretariat in August 1964 openly states that,

"...in many cases...the initiative of a single producer opposing a tariff cut which might affect the output of his plant can be much more successful than that of a large group of producers who are attempting to get tariff reductions for exports of the same country."

Despite the inadequacy of the tariff negotiation mechanism incorporated into the Montevideo Treaty, tariff reductions achieved in the 1961-63 period leave considerable room for short- and medium-term trade expansion within LAFTA. It is estimated, for example, that Mexican exporters have not yet taken advantage of concessions that give them a considerable competitive edge over third-country producers. Mexican imports from the zone increased by more than 50 percent in 1964, after South American producers had begun to explore opportunities offered by the Mexican market. This fact represents incontrovertible evidence that the limited scope of selective tariff reductions is an important, but not the only obstacle, to the steady and rapid expansion of regional commercial relations.

Other Forms of Cooperation

Economic integration can hardly progress without some measure of monetary and financial cooperation among the participating countries. In this field, the initiative has come almost exclusively from the Inter-American Development Bank (IDB), despite the fact that its Charter gives it no clear mandate to assist regional integration.

The IDB has established a small revolving fund of \$30 million for financing intraregional exports of capital goods to provide Latin American manufacturers and exporters with the necessary credit to compete with suppliers from other parts of the world. This fund grants medium-term financing (from six months to five years) for the export of a large variety of capital goods produced or manufactured in any republic from raw materials or components of national or regional origin. The Bank's credit facilities can also be applied to goods, with components originating partly outside Latin America, if these represent less than half of the final price of the finished product.

In its ordinary credit operations, the IDB no longer judges the feasibility of a project exclusively in terms of the project itself or of its impact on the national economy. If it is related to the integration of two or more Latin American economies, a project is assigned an additional and decisive priority. The "integration component" -- destined to become an increasingly important element among the eligibility criteria for IDB financing -- relates principally to industrial projects and programs for agricultural expansion and diversification, but it is being applied more and more to other fields such as transportation, communications, and electric power facilities.

Finally, the Inter-American Bank actively supports and provides financial and technical assistance for integrated development of border areas between neighboring republics. The first program of this kind elaborated under the auspices of the Bank covers the northern border provinces of Colombia and Venezuela, which are characterized by a large degree of resource complementarity and an extensive two-way trade. The program calls for integration of public service facilities such as highways, communications, and electric power.

The basic argument in favor of a regional payments arrangement in Latin America, as stated by a United Nations expert shortly after the signature of the Montevideo Treaty, continues to be valid today.

"For many countries in Latin America, the reduction of trade restrictions may be incompatible with full payments in convertible currencies. If they are to pay wholly in dollars for their imports from other countries in the area, they may find themselves compelled to maintain restrictions on trade with one another not less severe than the restrictions which they employ in trade with the rest of the world. In other words, given the existing foreign exchange position in Latin America, the conduct of intraregional payments on the basis of complete settlement in gold or dollars would defeat the whole purpose of a common market by making the liberalization of trade impossible, or at least very difficult."

Latin America's international liquidity position continues to deteriorate, even if one ignores the staggering growth of its external indebtedness during the past five years. Many factors are involved. First, the Montevideo Treaty offered no guidelines in the field of monetary cooperation. Second, the most ambitious proposals for the solution of regional payments problems were drawn up prior to the signing of the Montevideo Treaty and proceeded on the assumption that the regional integration agreement would be much broader than the one eventually embodied in the Treaty. Third, in spite of the insistence of experts, the majority of national monetary authorities -- except in Central America -- have never learned to think in regional terms. Finally,

the attention of most of the central banks in South America continues to be taken up with the overwhelming and urgent short-term problems of inflationary pressures. It is highly probable that these factors -- together with the lack of coordination among various regional organizations dealing with monetary matters -- provide an explanation of the failure to progress.

In view of the general deadlock on the governmental level, attempts are presently being made to bring about some kind of cooperation among the region's commercial banking systems. Under the auspices of the Center for Latin American Monetary Studies (CEMLA), the creation of a Latin American bankers' federation is being explored and an effort is being made to foster some degree of integration of the incipient capital and money markets in Latin America.

The case of regional maritime transport cooperation offers another interesting example of noncommercial efforts at regional cooperation. Between 90 and 100 percent of the region's total trade is carried by sea. Moreover, because of the lack of adequate inland communications systems, maritime transport accounts for almost 90 percent of intra-Latin American trade. The participation of the region's merchant fleets in intra-LAFTA trade is also far from impressive.

At the time of the Montevideo Treaty negotiations, it was generally agreed that, since transport facilities follow, rather than precede trade, maritime transport matters should be left for the future consideration of interested governments and shipping lines in the area. At the second annual LAFTA Conference held in Mexico City in the fall of 1962, the findings of a group of experts on the obsolescence of most of the merchant marines and the extremely unsatisfactory state of the region's principal harbors led to the adoption of general guidelines for a regional maritime and inland water transport policy.

While transport cooperation and monetary and financial coordination are not mentioned expressly in the Montevideo Treaty, the promotion of industrial complementarity is recognized as one of the important objectives of LAFTA. This important, but clearly unorthodox feature of the Treaty, viewed by its critics as an invitation to the cartelization of industrial production, grew out of theoretical and practical considerations. ECLA's early studies demonstrated indisputably the consequences of failing to institute planned regional specialization of basic industries. If, by any chance, a rapid liberalization of tariffs on capital goods occurred, heavy and basic industries would concentrate around existing industrial centers in Argentina, Brazil, and Mexico.

The function of the industrial complementarity agreements foreseen in the Montevideo Treaty was to be threefold: to take optimum

advantage of possible economies of scale; to use external economies offered by member countries in a relatively equitable way; and to offer some industrialization opportunities to the least developed LAFTA members who might otherwise become economic "colonies" of the major republics.

In respect to complementarity agreements among state-owned industrial enterprises, nothing has happened to date. This serves to confirm the fact that these enterprises are not subject to any effective control by central governments. The picture prevailing in the private industrial sectors is somewhat similar, judging by reports of numerous sectoral meetings under LAFTA auspices during 1963 and 1964. In view of the attitudes still prevailing among managers of state-owned industrial corporations and most private entrepreneurs, and the lack of progress in harmonization of national industrial development plans on the governmental level, only two industrial complementarity agreements have so far entered into force. The first one, signed in July 1962 by Argentina, Brazil, Chile, and Uruguay, covers statistical machines; the second, signed in November 1963 by the same four countries and Mexico, applies to the electronics industry. A third agreement on glass manufacturing in Argentina, Brazil, Chile, Colombia, Peru, and Uruguay is still awaiting ratification.

Prospects for LAFTA

LAFTA's five years of experience have demonstrated that an attempt to accelerate economic growth by integrating a number of underdeveloped economies is an extremely difficult task that involves political as well as economic issues. It is a far more complicated task than traditionally minded theoreticians of international trade imply. In underdeveloped countries, the forces of supply and demand do not function either automatically or efficiently. Thus, the establishment of a uniform import tariff is not only highly difficult on economic, administrative, and other grounds, but is of little significance by itself. It would be meaningful only if mechanisms were already in existence to provide, for the participating countries, a fairly equitable distribution of benefits arising from the integration program. A common tariff, therefore, should probably be considered one of the final steps at a very advanced stage of integration.

It is no accident that the tensions within LAFTA originated among the least developed countries. Bolivia, which participated in the Montevideo Treaty negotiations, did not join LAFTA, declaring that, in view of its extreme underdevelopment, its dependence upon non-Latin American sources of supply, and its inability to sell anything to neighboring countries, it could hardly expect to gain by substituting imports from the free trade zone for those from the outside. A few years ago, Ecuador threatened to withdraw from LAFTA because of

fiscal losses resulting from the reduction of duties on intrazonal imports and its inability to expand exports to the area. Chile, Colombia, and Uruguay are openly talking about the LAFTA crisis and advocating a complete overhaul of the machinery of the Montevideo Treaty. Not only do these three countries now have considerable trade deficits with the zone, but, because of the inadequacy of their production structures, no improvement is envisaged as long as the integration program limits itself to trade liberalization.

The authors of the Montevideo Treaty were aware that the progress of integration would depend on an equitable distribution of benefits among the participating countries. Reciprocity, however, is supposed to be measured in terms of gains from regional trade. Because of the great differences in relative development levels within Latin America, reciprocity, so defined, just cannot be obtained. For example, the fact that in 1962 Paraguay received free entry for its exports into the zone did not have the slightest effect on its trade relations with LAFTA. Neither did this new comparative cost advantage situation result, as it should have according to the neoclassical theory, in a reallocation of Paraguay's production factors and in an inflow of external capital and new technology.

Most of the measures addressed to the less developed countries in the Treaty dealt with the mechanics of trade liberalization, but some recommendations went further. The Treaty proposed that LAFTA members as a group provide financial and technical assistance to expand the productive activities of less developed countries. In 1963, the third annual Conference elaborated a special program to implement these recommendations, including financial aid, technical assistance, and joint institutional support of economic aid requests submitted to international financial organizations by the underdeveloped members. However, these proposals were not translated into concrete action. The matter only became further complicated when Chile, Colombia, Peru, and Uruguay -- a group of countries with insufficient domestic markets -- began to complain about a lack of benefits from the integration program. Recognizing the validity of these complaints, LAFTA's Industrial Development Advisory Commission was asked to give priority to an elaboration of regional industrial projects which might be established in the national territories of this middle group.

Proposals for Modification of LAFTA

Although preoccupation with LAFTA's unsatisfactory progress is not a recent development, it was not officially expressed until the spring of 1963 in a joint declaration issued by the Presidents of Brazil and Chile. This initiative coincided with the appearance of a study, written by Raúl Prebisch just prior to his retirement from the post of Executive Secretary of ECLA, which was openly critical of LAFTA's

achievements. First, he proposed that quantitative targets for tariff reductions should be fixed for broad commodity groups to bring down the tariff average on all products to 15 percent and to eliminate all other trade restrictions within the period covered by the Montevideo Treaty. Second, a number of complementarity agreements should be negotiated simultaneously in basic and dynamic industries, as well as in some slowly growing industries. Third, the principle of reciprocity should be redefined by linking the trade liberalization program with industrial complementarity agreements and a regional payments scheme. Finally, an institution endowed with considerable financial resources should be established at an early date to finance regional industrial projects and trade flows, and to assist the adjustment of those economic activities that might be negatively affected by the accelerated trade liberalization program.

During the year and a half after the Brazilian and Chilean declaration and the new Prebisch proposals, a number of recommendations and suggestions originated among groups of experts within and outside LAFTA. The Special Commission, recently established by LAFTA to analyze the obstacles to a speedy implementation of the Montevideo Treaty, reported in September 1964 that the absence of firm commitments on the part of LAFTA members both in trade and nontrade fields had slowed down trade liberalization and had inhibited the expected rate of economic growth in the region as a whole. It was again proposed that the Contracting Parties coordinate their economic and trade policies, harmonize their national development plans, and take measures to incorporate agricultural commodities into the trade liberalization program. The Commission also argued for the speedy negotiation of complementarity agreements in sectors of basic importance for economic development; the establishment of two regional consultative bodies representing national planning agencies and monetary authorities; the acceleration of multinational investment programs in the fields of electric power, transport and communications; and the search for a new automatic negotiations formula for reciprocal tariff concessions.

Once again, as in the case of the Montevideo Treaty itself and in the ninety resolutions approved by the three LAFTA Conferences, little of substance was added to general recommendations. The gist of the Special Commission's report can be reduced to a call for more consultative organs, more experts' meetings, and more studies, as if LAFTA's shortcomings and difficulties were not sufficiently known by late 1964. This frustrating vagueness can only be explained by the fact that LAFTA's Secretariat carries very little weight and that governmental representatives at meetings of subsidiary organs of LAFTA's Executive Committee are not empowered by their respective governments to enter into more substantive discussions.

It seems doubtful that any substantial progress can be achieved without redrafting the Montevideo Treaty to include a detailed program to which participating countries subscribe without reservations. Whether this can be done depends on the readiness of LAFTA countries to agree that regional and national policies must prevent the emergence of severe intrazonal trade disequilibria, to assure comparable long-term rates of growth without increasing economic disparities, and to permit all members to participate in the industrialization process. These objectives can hardly be achieved by annual tariff negotiations and occasional consultations in nontrade fields. Balanced economic growth implies the abdication of some part of national sovereignty by each participant and the efficient functioning of a number of regional executive agencies whose final decisions will be accepted by all parties.

In summary, a new treaty or a set of agreements added to the present Treaty should provide for the gradual establishment of a customs union, a regional payments scheme, a regional development bank, a joint program of fiscal incentives for new investment, a network of industrial complementarity agreements, and a compensation fund for the less developed countries. A final condition for the program's success lies in the willingness of industrial countries to coordinate their aid policies toward the integrating area, rather than to continue the present labyrinth of aid programs that are often determined by short-run political considerations or by the pressures of domestic exporters. The progress made by the Central American common market, in which most of these conditions have been fulfilled and in which the task is also easier because of similar economic development levels, is evidence of the validity of such a many-faceted approach.

PROPOSALS FOR THE CREATION OF THE
LATIN AMERICAN COMMON MARKET

Felipe Herrera, José Antonio Mayobre,
Raúl Prebisch and
Carlos Sanz de Santamaría

[From Proposals for the Creation of the
Latin American Common Market,
Washington, D. C., Inter-American
Development Bank, 1965, 31 pp.,
no charge.]

[This document was prepared by the four authors, all well-known Latin American economists and top officials of international organizations, in response to a specific request from President Eduardo Frei of Chile. It constitutes a powerful statement of the goals and means of Latin American integration, the main points of which are reprinted here.]

These are
excerpts
from the
proposals.

This document conceives the general policy of Latin American integration to be a series of measures covering commercial policy, regional investments, monetary and payments policy, and certain basic principles required for the proper functioning of the common market.

Felipe Herrera is President of the Inter-American Development Bank. José Antonio Mayobre is Executive Director of the United Nations Economic Commission for Latin America. Raúl Prebisch is Director General of the United Nations Conference on Trade and Development and Carlos Sanz de Santamaría is Chairman of the Inter-American Committee on the Alliance for Progress.

Trade Policy

The Montevideo Treaty constitutes an important step toward the establishment of the Latin American common market, and member governments have declared their intention of doing their utmost to create favourable conditions for attaining that purpose. Moreover, the immediate objectives and the commitments assumed have so far been primarily those required in order to create the preferential instrument within the juridical context of a free-trade area by means of selective negotiations on a commodity-by-commodity basis. This cumbersome procedure of miniature negotiations is showing itself to be incapable of bringing about a substantial liberalization or an important expansion of trade. As the stage of easy concessions comes to an end, it has become increasingly more difficult to include new products in the lists. Moreover, in each negotiation, vested interests exert pressure on governments to exclude products that could be exposed to competition from the rest of the area. As a general rule, the selective procedure limits tariff reductions to a specific number of items and makes it almost impossible to achieve the general liberalization of reciprocal trade.

It is considered necessary for the Latin American countries to assume four closely interrelated commitments to be fulfilled within a period of ten years: firstly, to establish quantitative targets for the desired maximum level of customs duties -- including restrictions of equivalent effect -- to be attained and to adopt a gradual and automatic mechanism for the application of such a system; secondly, to eliminate gradually the application of quantitative and other nontariff restrictions on intraregional trade; thirdly, to establish a common tariff vis-à-vis the rest of the world; and, fourthly, to establish a system of reciprocal preferences for member countries to enjoy in their intraregional trade pending the establishment of the definitive preferences in the common tariff.

As to the first commitment, it is proposed that, at the end of the specified period, participating countries should not be able to levy customs duties in their intraregional trade exceeding 20 percent of the c. i. f. value of each product, with the exceptions that are explained later, particularly with respect to the relatively less developed countries. For obvious reasons, those reductions should not be left until the end of the period, but should be introduced annually. Once this idea is accepted, the technicians should present appropriate formulae for bringing this quantitative target into effect within the established time-limit.

As for the second commitment, quantitative and other nontariff restrictions on intraregional trade -- other than safeguard clauses -- should also be gradually and automatically eliminated within the same

period in accordance with formulae proposed by the technicians. These formulae should enable the above-mentioned restrictions to be converted into customs duties that would be subject to the other commitments proposed in this section.

As regards the third commitment with respect to the common external tariff, the greatest efforts should be made both to attain uniform tariffs as soon as possible for raw materials and intermediate products, in order not to dislocate competition among countries of the system, and to establish common external tariffs in the sectorial complementarity or industrial integration agreements, in order to obtain a reasonable degree of protection against external competition.

With regard to the fourth commitment, until the common external tariff is achieved, a system of preferences should be introduced for products of member countries when the preferences resulting from the process of tariff reduction are insufficient to satisfy the principle of reciprocity.

Regional Investment Policy

It would be a mistake to assume that the efficient manipulation of the trade policy instruments described above is enough to put the integration policy suggested here into effect. Since the play of economic forces, stimulated by tariff reductions, would not, by itself, lead to this result, it would be imperative to exercise some control over those forces.

Within the broad context of development, the common market investment policy must include a series of activities relating to integration of the large, import-substitution industries which, in addition to their importance in the development process, must help to overcome the external imbalance which is a feature of the more advanced countries of Latin America and which will soon appear in the others if current external trade trends continue. One result of the investment policy in all these industries might be the conclusion of a series of sectorial agreements within the next few years.

In order to prevent combinations which, in the execution of the agreements, would restrict competition, it would be desirable to provide for a gradual and reasonable reduction of tariffs vis-à-vis the rest of the world as soon as the Latin American industries had been strengthened.

Apart from the sectorial agreements, the regional investment policy should concentrate on the countries that are relatively less developed and on any country in which the process of integration might give rise to substantial difficulties.

Monetary and Financial Policy

It must be recognized that, besides disrupting their economic and social development, the inflation prevailing in some Latin American countries is a serious obstacle to integration. There is no doubt that the lack of an adequate system of reciprocal and multilateral payments and credits is a considerable drawback in the policy of reducing tariffs and eliminating trade restrictions among the Latin American countries. This effort and, generally speaking, the whole policy of integration, would be largely frustrated if there were no payments union. It is therefore necessary to provide for the periodic liquidation, in convertible currencies, of the balances which exceed the limits of the established credits and for the adoption of substantive measures to eliminate the causes of the continuing disequilibria. In this connexion, the idea of forming a joint reserve fund of the central banks should be encouraged for various reasons, one being that it would help in mobilizing the external resources needed for the proper operation of the payments union.

In this regional plan, it would be necessary to use the services of the existing commercial banks and, with their close cooperation, to promote the development of a system of short-term commercial loans to encourage Latin American trade.

Other Recommendations for the System of Integration

Reciprocity of advantage within the common market is an essential principle for its smooth functioning. No country will be able to go on deriving greater advantages than it grants to others.

If integration is to succeed, all the countries must have, in actual practice, equal opportunities to profit from the establishment of the common market. For that reason, the relatively less developed countries require preferential attention and special treatment, particularly in three fundamental aspects: trade policy, technical and financial assistance, and regional investment policy. With regard to the execution of trade policy, the less developed countries should have longer periods in which to reach the quantitative goals set for the reduction and elimination of customs duties and other trade restrictions and to establish the corresponding preferential margins for intraregional imports. There is no doubt that their incorporation in the regional integration process will require a special effort of technical and financial assistance. The regional investment programmes must also give them preferential attention, especially in connexion with power supply and the linking of those countries with the rest of the region, with regard both to means of transport and to communications systems.

While the process of readjustment is going on, it is essential that member countries should have at their disposal defensive measures which they can take in cases where their compliance with the agreements entered into jeopardizes activities of obvious importance to their economies, or seriously affects their balance of payments or levels of employment. Such measures could consist, for example, in the provisional imposition of import quotas or tariff rates higher than those agreed upon. These measures could not be left to the sole discretion of the importing countries; they would have to be authorized by the competent organs of the common market so that the exporting countries would have some guarantee that measures of this kind would not be arbitrary, or be continued beyond the reasonable period necessary to bring about the required readjustment.

Foreign capital undoubtedly has an important part to play in the development of our economies, particularly when it operates in association with local entrepreneurs in industries which are so technically complex or so capital-intensive that access to them is difficult for Latin American entrepreneurs alone at their present stage of development. Foreign firms generally have considerable exporting experience, and their experience, in conjunction with the efforts of our own entrepreneurs, could be of great use in ensuring better exploitation of the opportunities offered by the common market and, particularly, in promoting the export of industrial goods to the rest of the world. However, if the Latin American entrepreneur is to be able fully to fulfill his function, this is not enough; he must also be given solid technical and financial assistance. This is a responsibility which will have to be shared by the actual countries concerned and by the international organs and industrialized countries which are participating in the development of Latin America.

DISTRIBUTING THE BENEFITS OF
ECONOMIC INTEGRATION AMONG
MEMBER COUNTRIES: THE
EXAMPLE OF THE EAST AFRICAN
COMMON MARKET

Peter Newman

[From "National Economic Development
in a Long-Established Common Market:
The Case of East Africa," a paper presented
at the annual meeting of the African Studies
Association of the United States in Chicago,
October 23, 1964.]

Excerpts from
a part of the
paper and a
summary of
the remainder
begin on the
following
page.

[Since Professor Newman delivered his paper,
Tanzania (then the United Republic of Tanganyika and
Zanzibar) has acted unilaterally to create its own
Central Bank and currency. It was the general under-
standing of the Kampala Agreement in Kenya and
Uganda that the whole complex of joint institutions
formed a unified package and that disruption of any
one of these would bring into question the continuance
of the others. Therefore, it remains to be seen how
far the Agreement will continue in force and to what
extent it may be modified to suit new circumstances.]

Peter Newman is a Senior Associate
with Robert R. Nathan Associates, Inc.
of Washington, D. C. Most recently he
was Visiting Professor of Political Economy
at the Johns Hopkins University, and in
1963-4 was Economic Advisor to the East
African Common Services Organization,
under the auspices of the United Nations
Technical Assistance Administration.

In recent years, there have been many moves to form customs unions in various parts of the underdeveloped world, most of them having the common underlying theme that, by thus expanding the markets facing each country, national economic development would be significantly accelerated and so the path of escape from poverty made less difficult. Unhappily there is no presumption in economic theory that a customs union will necessarily result in net benefits to every one of its members; nor is the factual evidence conclusive, the cases of the southern states of the United States and of southern Italy demonstrating the possibility of coexistence of areas of sustained high prosperity with regions of prolonged stagnation. It is, therefore, of interest to examine the question both from a theoretical and an empirical viewpoint, and the two parts of this paper attempt to do this, setting out first a brief analytical statement of the problem and then exemplifying the analysis by a discussion of the current situation in the East African common market.

[In the theoretical portion of his paper, which we summarize here, Professor Newman proposes two economic models of types of countries engaged in economic integration. Model I is characterized by factor immobility; it is a Ricardian world where economic activity depends on appropriating and exploiting existing resources, as is done in traditional agriculture and mining. In Model II, very great resource mobility is postulated. This model more nearly approximates modern industrial economies, where activity depends not so much on organization to exploit immobile existing resources as on organization to create resources and to achieve economies of scale.

The author identifies the two principal arguments for customs unions as (a) more efficient geographical distribution of economic activity based on comparative cost considerations and (b) more efficient production through economies of scale in the larger market. He argues that the comparative cost argument is more relevant to Model I economies with their relatively fixed asset patterns and slight asset mobility, while the economies-of-scale argument applies to Model II, with its factor mobility and resource creation.

On the basis of this analysis, the author examines the effects of a customs union between two countries: A with a vigorous Model II economy, but also some Model I activity, and B, where Model I activity predominates. Because of factor mobility in Model II, that vigorous sector of country A severely batters country B's infant Model II sector and impinges on Model I activities in both countries; for example, mass produced textiles displace handicrafts. There are some "trickling down" or "spread" effects, but they probably do not permit B to grow as rapidly as it would have in the absence of a customs union. Therefore, Professor Newman argues that customs unions between developing countries which are at different levels of development tend

to be unstable. Either they will evolve toward political union, under which a common political conscience will produce greater "spread" effects to benefit the less developed member, or they will tend to dissolve.]

The Case of East Africa

It would be inappropriate in such a short paper to trace out in any detail the application of the previous analysis to the case of East Africa. Obviously several modifications have to be made in order to adapt the theory to local conditions. None of the three countries fits these simple Models exactly, though Kenya does have a relatively substantial Model II sector in industry and agriculture, as well as a large Model I sector; the United Republic of Tanganyika and Zanzibar has been mainly a Model I economy (though naturally now trying to change); and Uganda occupies an intermediate position, with a peasant cash crop agriculture providing the basis for slow progress toward modernity.

The easy picture of a customs union suddenly being formed from two previously sovereign nations is not applicable either, since the union was formed over a generation ago, and between three territories that were then each in colonial status, a factor which meant that popular pressure was less able to manifest itself than is the case today. Indeed, the pervasiveness of the colonial influence makes it extremely difficult to identify that proportion and those parts of the uneven Model II development in East Africa that were due solely to customs union influences, as distinct from the imbalances brought about by the way in which the colonial mechanism worked. Events since independence -- for example, the considerable increase in the number of factories in Tanganyika -- indicate that it may be dangerous to ascribe all, or even the major part, of the structural imbalance to negative effects of the customs union, since vigorous national economic planning within the union may make up much of the leeway. One should also add the existence of the common currency, and of such common services as railways, posts and telecommunications, as further complicating factors to our analysis of a simple customs union.

Some broad implications of the elementary theory can be distinguished. There has been little specialization along lines of static comparative advantage for purposes of interterritorial trade, partly because of the inherent diversities of national resources and endowments within each country, partly because much of the Model I agriculture is at subsistence level, and partly because there have, in fact, been quite substantial barriers of a nontariff, import-licensing kind to the movement of agricultural commodities between the three areas. The chief food products that are traded among the countries (wheat, sugar and dairy products) are, surprisingly enough, mainly outputs of

the Model II sectors of Kenya and Uganda rather than of Model I; hence the spread effects have not been at all strong. Indeed, it has been argued that even within one of the territories (Kenya), the artificial barriers imposed on African farmers have seriously prevented the principle of comparative advantage from working efficiently inside Kenya. If this is true, then it is only to be expected that the spread effects have been even less on an interterritorial scale.

Consumers everywhere have suffered from the external tariffs that protect local commodities, but this is a characteristic of most developing countries (consider the early history of the United States) and is only serious if the local industries are more inefficient than they need to be, and if their locations are not spread evenly over the region. Comparatively few local industries appear to be seriously inefficient, and the best corrective for such inefficiencies as do exist is to allow as much internal freedom of entry as possible. The unevenness of the geographical, and particularly of the territorial, distribution of industry is another matter however, and has led to very severe strains on the common market.

It is not surprising that such strains should manifest themselves when the statistical consequences of the uneven development are so glaringly apparent. From 1959 to 1963, the average deficit incurred by Tanganyika in its visible trade with Kenya was 61 percent of total trade between the two countries; for its trade with Uganda, the corresponding figure was 55 percent. Kenya's average surplus in trade with Uganda was 17 percent. If one were to add the "invisible" items, which are particularly important in Kenya-Uganda trade, the surplus of Kenya would be much larger. Perhaps an even more significant statistic is that in 1962 Kenya accounted for 76.4 percent of interterritorial exports of manufactures, Uganda for 20.0 percent and Tanganyika for only 3.6 percent.

The Kampala Agreement

Both the structural imbalances giving rise to such symptoms, and the symptoms themselves, have naturally been the cause of much discontent with the customs union that has been expressed by the deficit countries, especially by the United Republic, where since independence there has been a serious attempt to embark upon vigorous and systematic economic planning. It was felt, with some justification, that the earlier start on industrialization that had been enjoyed by Kenya would make it difficult to initiate new industries engaged in similar activities in the deficit countries, even though, in the longer run, one might expect such industries to be comparably efficient with those in Kenya. Since industrialization plays a major role in the forward planning of both the United Republic and Uganda, the customs union came to be looked upon as a source of frustration, rather than as a tool for rapid growth.

If the projected East African Federation had gone forward at the speed which was at one time envisaged, these problems of imbalance would most likely have been handed over to the Federal Government to solve, although one can easily imagine that the problems would not have been simple. As it was, the growing conviction that strong Federal central planning was a long way off increased Tanganyika's desire for serious modifications in the working of the common market, in order to accommodate the programs contained in her Five Year Plan, which became effective in July 1964. This pressure from Tanganyika resulted in a series of negotiations between the economic ministers and officials of the three countries. The agreement reached at Kampala at the end of April 1964 was subsequently ratified by the Heads of Government.

The provisions of the Kampala Agreement are aimed specifically at reducing the imbalances in visible interterritorial trade, and consist of a wide range of measures. For a number of industrial products which are currently produced in each country or for which production is now planned, direct official approaches have been made to each of the large companies involved to persuade them that, in principle, each territory's consumption of the product line should be produced within its borders. The full application of this principle in the period 1961-63 would have reduced the surplus of Kenya with Tanganyika by 35 percent. Bearing in mind the nature of the technology in these specified industries, it is probable that this set of changes will not bring about, at least after the "infancy" stage, either a significant increase in costs of production or a serious loss of employment in the "surplus" countries.

Secondly, for those industries which can operate economically on a territorial scale, it is proposed to institute a quota system applicable to exports from "surplus" countries to "deficit" countries. If, for example, the United Republic had a local or foreign investor (whether private or public) who was interested in establishing a factory for the production of soaps and cleansing preparations, the United Republic Government would have a prima facie case for applying a quota against export of these commodities from Kenya and Uganda to the extent of its net deficit in those products and could thus assure a market for the local factory of at least that amount. A cardinal principle governing such a scheme must be, of course, that the quota in force limiting exports from "surplus" countries should not exceed the productive capacity of those commodities in the "deficit" country. Otherwise, there would be diversion of the latter country's imports from East Africa to the outside world, contrary to the spirit of East African cooperation.

It was also agreed that countries in surplus should examine their current trading patterns to see in what direction they could increase purchases from the countries in deficit. Partly to secure this end, and

partly as a first approach to a fully coordinated policy on the location of the large scale industries, i. e., those which require more than any one territorial market for economically feasible operation, it was decided, as a matter of urgency, to allot to each country exclusive rights in the development of certain of these large industries. Under this provision, the United Republic has a monopoly in the development of four-wheel-drive car manufacture and assembly, in the manufacture and assembly of certain types of lorries and trucks, in radio manufacture and assembly, and in the manufacture of motor vehicle tires and tubes. Uganda has exclusive rights in bicycle assembly and manufacture, and in the manufacture of nitrogeous fertilizers; and Kenya in the manufacture of incandescent and fluorescent lamps. All future development in these seven named industries must, therefore, adhere to the territorial pattern laid down by the Agreement. In some of these industries there are already small firms operating in a territory other than the one designated as having sole rights. In such cases existing producers' interests will be safeguarded, but most expansion will take place only in the stipulated territory.

It was recognised, however, that the process of mutual give-and-take by which this allocation was arrived at, however necessary as a temporary expedient, was not sufficiently well based in economic logic as to afford a precedent for future allocations of larger-scale industries. It was, therefore, decided to appoint a Committee of Industrial Experts from outside East Africa, which would give advice both on a suitable geographical pattern of such industries and also on measures, such as a system of agreed differential incentives, by which such a pattern could be brought about.

The Kampala Agreement embodies structural reforms in the East African common market of a type which, as far as I know, are unique in the history of common markets. Its aims are to eliminate the harmful effects of the customs union, especially those which -- together with the effects of colonial policy -- have led to industrial backwardness in some regions, while at the same time preserving the union's beneficial effects, especially those which provide satisfactory and rapidly growing markets for the products of the larger-scale industries. In these aims, it has a fair chance of success, provided that it is operated in a spirit of expansionism rather than restrictionism. For example, the working of the quota scheme facilitates the establishment of industries in the United Republic or in Uganda that would substitute primarily for imports from the rest of East Africa, rather than from the rest of the world.

This would not necessarily be an undesirable development, since such industries are often those which, because of their relatively simple technology, are the first to be established in any rational industrialization programme. But, it does imply that, to that extent, demand

for the products of these industries located in the rest of East Africa would be lessened, and, therefore, that the countries affected would naturally wish to accelerate the expansion of new industries, hoping to establish new product markets throughout East Africa to replace those which had been lost.

Such a development, however, would naturally tend to increase the interterritorial trade imbalances which had previously been reduced by the working of the Kampala Agreement, and on that ground alone attempts might be made by the deficit countries to inhibit such expansion. This consequence would be highly undesirable from the point of view of economic growth, but might arise if the true function of the Agreement were regarded as primarily that of reducing interterritorial trade imbalances, rather than -- what I would consider a much more constructive approach -- that of promoting completely balanced and vigorous industrial growth throughout East Africa.

AGRICULTURAL PLANNING

In almost all underdeveloped countries, agriculture constitutes the largest sector of the economy in terms of employment and of output. Without profound changes in agriculture, development cannot proceed. Recent evidence of mounting food deficits or dwindling food exports in less developed countries, where progress in agricultural modernization has not been as great as expected or where population growth has exceeded growth in food output, has focused the attention of planners on agriculture.

In the following section, Lester Brown studies the global food problem in the context of capital scarcity, population growth and the crowding of arable land. He points to the necessity for a revolutionary rise in yields and examines factors that have correlated with such changes in the past. Walt W. Rostow suggests reasons for the planners' renewed interest in agriculture and rules of thumb for making agricultural programs work. The section ends with a description of the organization of the highly successful agricultural planning program in Taiwan by S. C. Hsieh, Secretary General of the Joint Commission on Rural Reconstruction.

POPULATION GROWTH, FOOD NEEDS AND PRODUCTION PROBLEMS

Lester R. Brown

[From World Population and Food Supplies, 1980,
American Society of Agronomy Special Publication,
Number 6, Madison (Wisc.), American Society of
Agronomy, 1965, no charge for single copies,
pp. 3-22.]

["Population Growth, Food Needs and Production Problems" was given as part of a symposium presented at the 56th Annual Meeting of the American Society of Agronomy, held in Kansas City, Missouri, November 16-19, 1964, in association with the Annual Meetings of the Crop Science Society of America and the Soil Science Society of America. Many of the 550 technical papers presented will ultimately be published in the journals of the three societies.

Excerpts
from the
paper begin
on the
following
page.

The ideas that Lester Brown has presented in this paper have been published in more extended form as Increasing World Food Output, Problems and Prospects, Lester R. Brown, Foreign Agricultural Economic Report, Number 25, Washington, D. C., U.S. Department of Agriculture, Economic Research Service, Foreign Regional Analysis Division, 1965, 140 pp. This Report contains a much more detailed analysis of yield takeoffs which have already taken place and of the factors which seem to have produced such takeoffs. The Report is available, free of charge, upon request to the Department of Agriculture.]

Lester R. Brown is Staff Economist of the U. S. Department of Agriculture and was formerly Assistant to the Administrator of the Economic Research Service of the Department.

More and more it appears that the task of feeding the rapidly growing populations of the less-developed regions of the earth will be man's Number One challenge in the remaining decades of this century. The problem must be solved within the less-developed regions. The transfer of food from the developed regions can help, but it is not the answer.

The food problem itself has always existed. It is the magnitude of the problem that has changed. Two factors are responsible. First, the number of people in the world is increasing so rapidly that it now seems quite likely that the increase in world population in the next 36 years will equal or exceed the current population. Secondly, this is occurring at a time when the amount of new land suitable for cultivation is rapidly diminishing.

The food problem is complex. It encompasses many variables and it crosses several disciplines. Our understanding of the problem is limited. Much of the literature in the field shows that we've been asking the wrong questions.

The question, "How much land can be brought under cultivation?" is not relevant. It becomes relevant only when we ask, "At what cost?" The answer to the latter question may help to explain why Brazil, the classic example of a country with "vast unused land resources" is well on the way to becoming one of the leading recipients of food under the U. S. Food for Peace Program.

Another question frequently asked, "What is the potential for expanding food output?" also lacks relevance. The more relevant question is, "What are the prospects for increasing food output?" To look at physical potential alone is to ignore the economic, technological, and institutional wherewithal required to realize the potential. Food shortages in the less-developed regions are not caused by a lack of potential, but by a lack of the wherewithal to realize that potential as quickly as the current rates of population increase require.

Situations Not Parallel

Perhaps because most of the literature in the field comes from the more advanced countries, there is a strong tendency to interpret the problems of the less-developed regions in terms of the past experience of the now-advanced countries. This often gives the impression that today's less-developed countries are facing conditions similar to those faced by the now-advanced countries at a comparable stage of development. Such is not the case.

Many of the conditions facing today's less-developed countries are not favorable to those countries. Some of these are:

- (1) The area of crop land per person is only a fraction of what it was in the now-advanced countries at a comparable stage in their development.
- (2) Population growth rates confronting today's less-developed countries are far higher than those existing in the developed countries at a comparable point in their history.
- (3) Significant opportunities for emigration as a means of alleviating population pressure do not exist for today's overpopulated, less-developed countries.
- (4) Because of higher rates of population growth and limited possibilities for expanding the area of land under cultivation, the area of cropland per person is shrinking much more rapidly than it ever has in the now-advanced countries.

Some factors favor the countries now attempting to develop. Principal among these is the backlog of agricultural technology accumulated in the developed regions. Many problems are involved, however, in attempting to transfer this technology, developed for temperate zone agriculture, directly to the tropical and subtropical regions.

Approaching the Problem

In considering the food problem, the world will be viewed in terms of the two principal economic regions -- the developed world and the less-developed world. To further simplify our discussion of the man-land-food relationship, we will rely heavily on the use of all grains considered aggregately as an indicator for agriculture in general. Grains account for 71 percent of the world's harvested crop area; they provide 53 percent of man's supply of food energy when consumed directly and a sizable part of the remainder when consumed indirectly in the form of livestock products. The difference between North America, producing 1,100 kilograms of grain per person each year, and Asia, producing only 225 kilograms, is the difference between an economy which can afford to convert a large part of its grain output into livestock products, such as meat, milk, and eggs, and one which requires for direct human consumption nearly all the grain it produces.

Indexes of Grain Production, Area and Yield, Population,
and Output Per Person by Economic Regions of the World,
1934-38, 1948-52, and 1960.*

Region		1934-38	1948-52	1960
Developed	Grain production	100	112	151
	Area in grain	100	96	100
	Yield per acre	100	116	151
	Population	100	106	120
	Output per person	100	106	126
Less-developed	Grain production	100	106	142
	Area in grain	100	118	132
	Yield per acre	100	90	108
	Population	100	123	146
	Output per person	100	86	97

*Developed regions are North America, Europe (incl. Soviet Union), and Oceania; less-developed regions are Asia, Africa, and Latin America.

Food Production Trends of the Past Quarter Century

The sharp differences between the two economic regions of the world are evident in the trends of the past quarter century. Grain output in the developed regions increased 51 percent between 1934-38 and 1960. All of the increase came from rising per-acre yields. The area in grain in 1960 was exactly the same as in 1934-38.

Within the less-developed world, the situation was quite different. Grain output increased 42 percent, but four-fifths of the increase came from the expansion of the area and only about one-fifth from rising yields. The less-developed regions expanded the area in grain by about one-third.

While total grain production increased in both economic regions, per capita grain production increased only in the developed regions where it was up 26 percent. Output per person in the less-developed regions in 1960, though up substantially from the postwar depressed levels of 1948-52, was still 3 percent below prewar. Per capita grain output in Latin America, the region with the fastest rate of population growth during this 24-year period, was 16 percent below prewar. The divergent trends of per capita output in the two major economic regions were due not so much to differences in overall output as to differences in rates of population growth. An updating of this analysis, using grain output per person as an indicator of food output per person, would

undoubtedly show a continuation of the disturbing trends already in evidence by 1960.

The most recent information available shows that while per capita output of food in the less-developed world trended upward during the 1950's, generally reaching prewar levels, it has declined steadily thus far in the 1960's. Food output per person in Asia, excluding Communist China, has dropped 3 percent from the postwar high reached in 1961. In Communist China, food output per person has dropped even more from the postwar high attained in 1958. In Latin America, food output per person has dropped lower each successive year since 1958, declining 7 percent over the past 5 years. Only in Africa, where food output per person has remained essentially unchanged over the past 5 years, has a downward trend been avoided.

Trade Trends of the Past Quarter Century

During the years preceding World War II, the less-developed regions of Asia, Africa, and Latin America were all net exporters of grain. Together they exported each year, on a net basis, 11 million tons of corn, wheat, rice, and other grains to the developed world. By the close of World War II, however, the less-developed world had lost its export surplus of grain, and the net flow of grain was reversed, moving from the developed to the less-developed world.

From 1948 to 1952, an average of 4 million tons per year flowed from the developed to the less-developed regions. As population growth in the less-developed regions gained momentum during the late 1950's and early 1960's, the net flow of grain increased -- reaching 13 million metric tons annually during the 1957-59 period, 20 million tons in 1961, and, according to preliminary estimates, 25 million tons in 1964.

According to the above indicators, one thing is evident. The less-developed world is losing the capacity to feed itself, -- it is no longer able to provide enough food for the large numbers of people being added to its population each year. A growing part of each year's population increase is being sustained by food shipments from the developed world, principally North America, and largely under concessional terms.

Food Needs in the Less-Developed Regions, 1980

We noted earlier that population growth rates now being experienced in the less-developed regions are without precedent. What do these increases mean when translated into food needs for, say, 1980?

The admittedly conservative UN medium level population projections show an increase in population from 2.06 billion in 1960 to 3.15

billion by 1980. This, combined with a modest allowance for an increase of 10 percent in per capita food consumption over the 20-year span, will boost grain production requirements from 470 million tons in 1960 to 767 million tons in 1980 -- an increase of nearly 300 million tons.

Several things should be pointed out concerning this 767 million-ton production figure. It assumes a modest rate of population growth and an accelerated transfer of food from the developed to the less-developed regions to nearly double the 1960 level. This modest rate of increase in per capita grain consumption of about 0.5 percent per year as a result of rising incomes will not eliminate the nutritional deficit in the less-developed regions; it is not likely to narrow the gap in nutritional levels between the two major economic regions; it is even less likely to satisfy the rapidly rising aspirations of consumers in the less-developed regions.

Even so, the additional grain requirements of 300 million tons will closely approximate the current output of North America and Western Europe combined. The effort required to attain an increase of this magnitude will seriously tax the resources of the less-developed regions. During the 24-year span from 1934-38 to 1960, these regions were able to increase grain output by only 134 million tons.

The Critical Transition

Why is the less-developed part of the world losing the capacity to feed itself? The cause of this disturbing trend can be described in simple terms. Historically, traditional societies increased food output along with population by simply expanding the area under cultivation. But now many densely populated, less-developed countries with rapidly growing populations have relatively little new land that can readily be brought under cultivation. Thus, additional food output must come largely from raising yields per acre. Herein lies the problem, for less-developed economies are not, almost by definition, well prepared to do this.

The less-developed regions have not been able to develop a yield-raising capability fast enough to compensate for the decline in the amount of new land brought under cultivation. Thus, per capita food output has begun to decline in many areas. It is perhaps ironic that Latin America, the region supposedly having the greatest potential for expanding its cultivated area, has experienced the sharpest decline in food output per person of any region in recent years. This does not necessarily imply that sizable areas of new land cannot be brought under cultivation. However, it does indicate that, given the indigenous technology and capital resources, land is not as abundant as commonly thought.

A major share of the people living in the less-developed regions live in countries which must look largely, if not almost entirely, to rising yields for additional food output between now and 1980.

The Takeoff Concept -- A New Application

A concept of an income takeoff -- a rather abrupt change from a condition of near-static income to one of steadily and continuously rising per capita income -- is now an integral part of development theory. The takeoff concept can also be quite appropriately applied to per-acre yields.

A yield-per-acre takeoff is defined as a rapid, continuous increase in yields sustained over a period of several years. Short-term increases in yields may not be a yield takeoff at all but simply a move to a slightly higher plateau. The movement to a higher plateau is often associated with one-time increase such as would be caused by completion of a large-scale irrigation project.

Once underway, yield takeoffs appear to be irreversible except in time of war or some similar disaster. Thus far, all have continued indefinitely; the rising yield trends have not leveled off or shown any tendency to level off. If anything, the rate of yield increase tends to accelerate as a country becomes more advanced. There is little evidence suggesting any natural factors that would significantly limit further yield increases in the foreseeable future, even in the high-yield countries.

Yield takeoff is a relatively recent phenomenon. Japan, which experienced a yield-per-acre takeoff during the last quarter of the 19th century, may have been the first to do so. Other major countries having attained yield takeoffs are the United States, the United Kingdom, Australia, Canada, France, West Germany and several of the smaller West European countries. Several major countries, however, have not yet generated a yield takeoff. Included in this group are India, Mainland China, the Soviet Union, and Brazil -- countries containing half the world's people. All four of these countries have emerged as food deficit countries in the last decade or so.

Preconditions for Yield-Per-Acre Takeoff

What is required to raise yields that was not needed to expand the area under cultivation? Stated otherwise, what are the preconditions for a yield takeoff, i. e., generating a sustained trend of rapidly rising yields? This question could be answered in agronomic terms -- in terms of fertilizer, water, and improved varieties. The problem could be approached from the standpoint of requisite institutions. In this paper, however, it will be answered in terms of some of the broad, mostly economic, considerations.

Literacy and rate of yield increase. One of the probable preconditions for a yield-per-acre takeoff is a reasonably high level of literacy. Steadily rising yields require a steady flow of new knowledge from the laboratory and experimental plot to the farm. Literacy permits the use of printed material, thereby facilitating the dissemination of research results.

What is the relationship between the level of literacy in an economy and the capacity to raise yields? An examination of literacy levels in major rice-, wheat-, and corn-producing countries shows a total of 24 countries with literacy levels below 50 percent. During the period 1935-39 to 1960-62, their average rate of yield increase was 0.17 percent per year. Among 13 countries with literacy levels between 50 and 80 percent, the average rate of yield increase was 1.12 percent per year. Some 23 major grain-producing countries had literacy levels above 80 percent. Yields increased an average of 1.43 percent per year in this group of countries. Countries only recently attaining high levels of literacy (mostly those in southern and eastern Europe) generally had lower rates of yield increase.

The available evidence indicates that it is exceedingly difficult for largely illiterate societies to develop a significant yield-raising capability. A high level of literacy, however, does not ensure a yield takeoff. A reasonably high level of literacy seems to be a necessary, but not sufficient, precondition for a yield takeoff.

Income levels and rate of yield increase. Another probable precondition for a yield takeoff would be capital -- capital that was not required when the food supply could be expanded by simply bringing new land under cultivation. The capital required to purchase yield-raising inputs is not generally available when incomes are still at subsistence levels.

Some 24 countries ranking as major producers of rice, wheat, or corn had average per capita incomes below \$200 per year. The average rate of per-acre yield increase for these 24 countries was 0.18 percent per year between 1935-39 and 1960-62. Twenty-five major grain producing countries had average per capita incomes between \$200 and \$1,000 per year. This group of middle-income countries raised yields at a rate of 1.03 percent per year. Ten countries had average per capita incomes above \$1,000 per year. Yields trended sharply upward in each of these countries, averaging 2.21 percent per year. The lowest rate of increase recorded for this group was 1.5 percent per year, and the highest, 3.7 percent per year.

In summary, it appears that yield-per-acre takeoffs are not easily achieved where average per capita incomes are below \$200. And, in general, the higher the per capita income, the easier it is to generate a yield takeoff.

Market orientation. The term "market orientation" refers to the share of farm output marketed. It is an indicator of how far an economy has progressed from being a traditional, subsistence-oriented economy to becoming a commercial, market-oriented economy. The more commercial and market oriented the agricultural sector becomes, the easier it is, other things being equal, to finance the capital inputs required to raise yields. When food output is increased by the conventional means of expanding the area under cultivation, capital inputs are minimal. But when food output can be increased only by raising yields, increased capital inputs are necessary.

The proportion of agricultural output marketed is influenced by many things -- such as size of farms, the nature of crops, prices of farm products, availability of marketing information, and proximity to markets. When output per farm family is low and the share of output marketed is small, there are many competing demands on the limited amount of cash available. Family necessities often take priority, leaving little for the purchase of yield-raising capital inputs.

In many less-developed countries, the share of farm output marketed is less than one-half; in some, it is less than one-fourth. In these countries, capital for investment in agriculture is scarce. The raising of yields, so dependent on increased capital inputs, will be a slow and arduous process.

The nonagricultural supporting cast. The nonagricultural supporting cast is here defined as those sectors of the economy outside the agricultural sector which provide either goods or services in support of the agricultural sector. In a traditional society where food output is increased simply by expanding the area under cultivation, agriculture can function rather independently of the remainder of the economy. But once the supply of readily cultivable land is exhausted and substantial increases in food output can be attained only by raising yields, the relationship changes. Agriculture becomes quite dependent on the remainder of the economy for yield-raising inputs.

Goods supplied by the industrial sector include all the physical inputs such as fertilizer, lime, insecticides, fungicides, herbicides, tractors, farm implements, tools, petroleum products, and many more. Services provided by other sectors include such things as transportation, financing, communications, and research. The need for agricultural research increases rapidly as the area-to-yield transition progresses.

In summary, a modern, yield-raising agriculture cannot develop in an economic vacuum. It is extremely difficult, if not impossible, for a country lacking a reasonably well-developed nonagricultural supporting cast to generate a yield takeoff.

Summary of preconditions. To describe the preconditions for a yield takeoff is, in fact, to describe the whole process of modernization and economic development. Although the preconditions discussed above are not, by any means, a complete list, they are sufficient to demonstrate the difficulties facing the less-developed economies as they seek to match population growth with increases in food output. Increasing the food supply by raising output per acre is far more difficult than doing so by simply expanding the area under cultivation. The failure to distinguish between the two methods of increasing the food supply and to recognize the greater difficulty associated with the yield-raising method has tended to obscure the magnitude of the emerging food problem.

Preconditions Plus Incentives: The Essential Combination

The basic preconditions described above are necessary for a yield takeoff but they are not sufficient. In addition to these preconditions certain incentives are required.

Favorable prices for farm products is one of the obvious incentives. The term "favorable prices" may be variously defined but in the context of this discussion favorable prices will mean favorable with respect to the purchased inputs required to raise yields. Less-developed economies often have much lower food prices and much higher fertilizer costs. One pound of rice in Japan buys three times as much ammonium sulphate as a pound of rice in India. This price-cost relationship was not so important when output could be readily increased by expanding the area under cultivation.

But favorable prices for farm products is not enough. The people on the land must be the principal beneficiaries of these favorable prices. Stated otherwise, there must be a strong link between effort and reward. The strength of this link is affected by such factors as patterns of land tenure, tax systems, and price policies.

Incentives differ from preconditions in that they can often be developed much more quickly, given the will to do so. They are usually policy matters rather than general economic characteristics. A policy of maintaining favorable support prices, for instance, can often be achieved by government directive.

THE INCREASING IMPORTANCE
OF AGRICULTURE IN ASIAN
DEVELOPMENT STRATEGY

Walt W. Rostow

[From "Economic Development in Asia,"
an address made under the sponsorship of
Asahi Shimbun at Tokyo, Japan, on April 23,
1965, and reprinted in The Department of
State Bulletin, Washington, D. C., Volume
LII, Number 1353, May 31, 1965,
US\$0.30, pp. 845-853.]

This is an
excerpt
from the
address.

If one examines in general the pattern of Asian development in the last decade, it is clear that, despite many vicissitudes, a great deal of progress has been made in manufacturing industry. With relatively minor exceptions, the contribution of industry to the domestic production of Asian countries has been rising, in some cases rising at a high rate -- averaging between 6 percent and 11 percent per annum over the past decade, as against an average increase of GNP of 4 percent.

An initial concentration on industry and a relative neglect of agriculture in Asian development were quite natural in political terms and also reflected an understanding, at the time, of what was economically desirable. The modernization of an economy consists, in its essence, in the progressive diffusion and absorption of what modern science and technology can offer, and industrial activity is the most dramatic and obvious form for the incorporation of modern technology.

Walt W. Rostow is Counselor of the
U. S. Department of State and Chairman
of its Policy Planning Council.

As in other developing areas -- for example, Latin America -- a good deal of Asian industrialization has been concentrated on the production of consumers goods in substitution for imports. The economy of a developing country can benefit from this kind of activity in two ways. In the first instance, it begins to learn to solve the problems of industry itself; second, by cutting down the import of certain manufactured consumers goods, it reserves more of its foreign exchange earning capacity for the import of capital goods and essential industrial raw materials. However, the development of import-substitution industries does not have a simple one-way effect on imports. By raising the level of income, it increases the demand for imports in general and, by advancing industrialization itself, it sets up an enlarged demand for imported capital goods.

The argument for an overriding emphasis on industry in the first phase of industrialization was reinforced by a widespread sense that industry was the essence of modernization while the continued concentration on agriculture and agricultural exports was a sign of continued inferior or colonial status. I recall in the early postwar years listening in Geneva to many speeches in the Economic and Social Council of the United Nations in which representatives from developing countries argued the priority of industry over agriculture. They argued from the simple and true fact that, as productivity per man was generally higher in industry than in agriculture, if productivity were to rise, a shift from agriculture to industry was necessary. Indeed, the reduction of the proportion of the working force engaged in agriculture remains one highly relevant measure of modernization.

The possibilities of import substitution of consumers goods have by no means been wholly exhausted throughout the region in the first phase of Asian industrial development; but there is a growing sense in the region -- and a correct sense -- that a new strategy is called for. Import substitution of consumers goods will no longer suffice.

The need for a new and wider strategy arises from two massive facts. First, in many critical parts of Asia the population increase is outstripping the rate of increase of food production. The region, taken overall, has become increasingly dependent on food imports. Second, the relatively slow rate of expansion in traditional Asian export products, combined with weak international prices for some Asian exports, has posed sharply the question: How can the developing nations of Asia earn more foreign exchange? Industrialization requires an endless expansion of imports, as the history of Western Europe, Japan, and North America indicates down to the present day.

There is no doubt that, in the first generation of postwar development, the importance of rural development to the total modernization of developing societies was underrated in many parts of Asia, and the

doctrines and policies for rural development, applied both by many Asian nations themselves and by those providing external assistance, were inadequate. It was not fully understood within many developing nations that agriculture is not merely an essential source of food for a rapidly expanding and urbanizing population, which was bound to use a large part of whatever increase in income that occurred to improve its diet, but that, in addition to this basic role in supplying food, agriculture is a critical source of raw materials for industry itself and, properly exploited, an important source for the earning of additional foreign exchange.

Finally -- and this is only now becoming fully understood -- mature industrialization requires much larger markets than the rather narrow urban markets which were sufficient to sustain the first phase of import substitution of consumers goods. The farmer is needed by urban industry not merely to supply food and raw materials and foreign exchange earnings; he is also needed as a customer for industrial products, if industrial momentum is to be sustained and Asian industry is to move on from its import-substitution phase to maturity.

Four "Musts" for Agricultural Development

This interconnection between industrialization and agricultural development becomes clear if one examines carefully what we have learned from the success stories and the failures in agricultural development in this first postwar generation. It is quite evident that agricultural development must be regarded as a complex, multi-faceted system -- just as industrial production is such a system. There are certain conditions which must be met if a sustained rise in agricultural production and productivity is to occur.

The question of essential infrastructure (roads, schools, et cetera) is, evidently, basic. This dimension of rural development is a necessary but not sufficient condition for the modernization of the countryside. The following four further factors appear to be essential to produce a true modernization of agriculture in a developing region.

First, the farmer must be offered a fair and reliable return for his product. In many cases this most simple precept has not been honored. In some Asian countries there are too many intermediaries between the farmer and the consumer. In other cases a traditional trading class exploits a monopoly position as an intermediary. Some governments deliberately keep farm prices low in order to keep down the urban cost of living. Finally, the lack of land reform or inadequate enforcement of existing land-reform measures often limits the farmer's return.

Second, the farmer needs credit at reasonable rates if he is to acquire the means to raise his productivity or shift to high-productivity cash or commercial crops.

Third, the farmer needs practical technical assistance relevant to his soil, his rainfall conditions, and to the change in method or product which is most efficient for him in his particular setting.

Finally, the farmer needs to have available two types of manufactured goods at reasonable prices: agricultural inputs, such as fertilizers, tools, and pesticides; and consumers goods of good quality at reasonable prices to make it attractive for him and his family to make the extra effort to increase his production and productivity.

A fair and reliable price; credit at reasonable rates; relevant technical assistance; and manufactured products at reasonable prices -- these seem to be necessary conditions for success, where roads, schools, and other basic infrastructure are provided.

If one examines the failures and frustrations in agricultural development in postwar Asia, one can find that one or more of these elements in the system was missing. There are a variety of ways in which these elements can be provided to the farmer. Producers cooperatives, for example, have proved effective in some cases; in others, modern food-processing activities have been able to provide the critical elements in the system, as have well-run plantations. However, it is important to note that a consensus has emerged from the sometimes frustrating efforts in many parts of the world over the past generation that the agricultural problem must be dealt with on all four of these fronts if we are to get the increase in production and modernization of rural life which is needed.

Agricultural Development Programs

India has attacked some of these problems in imaginative ways; but the scale of the problem has thus far outstripped the financial and administrative resources devoted to it. There has recently been an increased recognition in India of the need to devote more resources to agriculture.

Many of the countries of Southeast Asia have undertaken programs of agricultural development which have included producers cooperatives, government programs for provision of agricultural credit, and technical assistance through community development and extension programs. Typically, however, these programs have suffered from lack of attention and from inadequate administration. Land tenure arrangements and inadequately enforced land reforms have kept price incentives lower than is desirable. (Taiwan is an important exception in regard to land reform.)

Malaysia is an outstanding case of a country which is devoting major investment resources to agriculture to useful effect. The political situation in Malaysia has favored such a course. Malaysia's marketing system is effective, and both producers and consumers goods are readily available in rural areas at reasonable prices, although in the Malaysian case these goods are still obtained primarily through imports rather than by local manufacture. The heart of the Malaysian agricultural program is a land development scheme under which the Government helps individual farmers get started, through provision of land on reasonable terms, initial planting material for cash crops, and supporting technical assistance. Thus, through a combination of governmental and private action, the necessary elements are brought together.

In Thailand, a combination of agricultural research, the introduction of improved seed, and the opening of new agricultural lands through the development of roads and a malaria eradication program have produced a quite remarkable development of corn production. Thailand is now one of the world's leading corn exporters. It sells most of its crop to Japan.

In Pakistan, too, one can see a heartening expansion in agricultural production, accompanied by wide-ranging measures to modernize the countryside.

Improving Marketing Arrangements

Within the whole agricultural complex it is worth looking with particular attention at marketing arrangements -- both marketing from the farm to the city and marketing to the rural areas of manufactured goods.

In modern development economics and policy, there has been a systematic tendency to underestimate the importance of the marketing links between urban and rural life. This neglect stemmed, in part, from the initial concentration on industrial development and on the major initial tasks of building the economic and social infrastructure, notably education, transport, and the supply of electric power. It is perhaps appropriate for an economist to point out that all of us have been trained in a tradition, going back to the 18th century, which tends to emphasize production and leaves distribution to be dealt with as a second order of business.

The archaic and expensive methods of distribution which mark most developing nations take on, however, a critical role at the present stage in Asian development, for it is impossible to offer the farmer the inducements he needs if there is an extravagant gap between the price he gets and the price of his product in the city. Unless there is

greater efficiency in the distribution of manufactured products to rural areas, the selling price of such goods to the farmer will be so high that the market for manufactures cannot be widened at his inevitably low level of income.

What I am asserting as a general proposition, then, is that economic development in Asia can no longer be based on the immediate postwar rationale for industrialization. It is no longer a question of the priority of industry over agriculture. It is a question of modernizing rural life in Asia as a basis for continued rapid industrialization. Without the modernization of rural life, industrialization can be damped down or even throttled, not only by the pressure of population on food supplies or by the lack of adequate industrial raw materials or agricultural exports abroad but by the inadequacy of the domestic market itself.

Although the symptoms of this damping of industry by inadequate attention to agriculture can be observed in several countries of Asia, the most extreme case is, of course, Communist China, where failures in the agricultural sector led to the collapse after 1958 and to a present situation where industrialization over a wide front has been slowed down or stopped and scarce foreign exchange must be used on a large scale to buy food abroad for the coastal cities.

Future of Foreign Trade in Developing Asia

This chain of thought bears also on the searching question of the future of foreign trade in developing Asia.

It is clear that the capacity of the developing Asian countries to earn foreign exchange, and to earn it on a sufficient scale so that their growth becomes self-sustaining, requires an increase in what are often called nontraditional exports. We must all do what we can to facilitate exports of traditional Asian commodities and, by international agreements and other devices, to help sustain their prices; but of their very nature, and especially in a world of modern technology, there are relatively low ceilings on what we can expect from these efforts. This means Asia, in its effort to generate an increased flow of foreign exchange, must look to new kinds of agricultural products and raw materials, to agricultural and raw materials processed to higher stages, and to manufactured goods.

There are two observations I would make on this pervasive problem of the developing regions in Asia and elsewhere.

The first is that the development of new lines of exports is hard and serious work. Although foreign investment can play an important role in improving the competitiveness of exports through the import of

foreign technology, no amount of assistance from outside can substitute for the energy and attention of the government and the business community of the developing country. The possibilities of diversifying and expanding exports must be studied at home. Potential markets must be studied abroad. An export-mindedness must be made to pervade commercial and industrial groups which, in the first generation, have been able to sit in relative comfort, making high unit profits behind tariff barriers erected to sustain import-substitution industries. Bureaucratic arrangements for exporting must be simplified and financial arrangements provided which encourage an enlarged flow of exports. Diplomatic missions abroad must help the private sector establish reliable markets. Serious and sustained efforts at quality control must be introduced.

When these efforts are made, there is ample evidence that the skills available to developing countries make it possible for them to find sales outlets abroad for manufactured products. The remarkable export expansion of the Republic of China and of Hong Kong in the post-war period, as well as the longer experience of Japan itself, has demonstrated this proposition. Those who aim to assist in Asian development should be prepared to help at every stage in the generation and sale of such new export products.

A second observation is, perhaps, less familiar; and it is an observation which would link what I had to say earlier about the expansion in domestic markets to the capacity of developing countries to expand their foreign trade.

The most effective base for the export of manufactures is a large domestic market. It is no accident that for many developing countries, the first manufactured product to be exported has been cotton textiles. Indeed, this was how the Industrial Revolution began in Britain in the late 18th century. Britain was followed as an exporter by the United States in the early 19th century; then by many other countries, notably Japan and India; and now it is true of others. The reason is, of course, that even in countries with low levels of per capita income, the market for textiles is large; and it is natural that efficiency in production, distribution, and quality control should first be attained in such a mass consumption industry.

The history of manufactured exports is, in large part, the history of a series of projections abroad of skills developed in exploiting a large domestic market. In this century, the United States was the first country to develop a large export trade in automobiles, because we began the era of the mass automobile in the 1920's; and it is wholly natural that, now that several countries in Europe, as well as Japan, have entered the age of the mass automobile, the United States faces a number of effective competitors in the international markets.

What I am asserting, then, is that the expansion of the domestic market which is required to produce a modernization of rural life and an ample market for domestic industry is also the proper base for the development of diversified exports. In the first generation of postwar development in Asia, then, there was a concentration on consumers goods import-substitution industries and infrastructure. Both must continue to engage attention and resources in the decade and generation ahead. But the basic strategy for Asian development must shift, I believe, toward the modernization of rural life and the building of new interconnections between industry and agriculture, and toward a new seriousness in developing efficient and diversified export sectors.

AGRICULTURAL PLANNING IN TAIWAN

S. C. Hsieh

[From "Agricultural Planning in Taiwan, Republic of China," *Economic Review*, Bank of China, Head Office, Taipei, Taiwan, Republic of China, Number 103, January-February 1965, pp. 1-10.]

These are excerpts from the article.

The population of Taiwan is now over 12 million. About 48 percent of it is farm population. The total land area is 36,000 square kilometers. About one quarter of it is under cultivation and over one half (55%) is covered with forest. Approximately 530,000 hectares of the cultivated land is under irrigation. There are about 800,000 farm families with an average of about seven persons per family. The average farm size is only 1.08 hectares.

The principal crops of Taiwan are, in order of their importance, rice, sugarcane, sweet potatoes, pineapples, bananas, and tea. The annual rice production is a little over two million metric tons. It not only provides food for local consumption, but also leaves some 50,000 to 100,000 metric tons for export every year. The annual sugar output is about 800,000 metric tons, of which about 100,000 are for domestic consumption and the rest is exported to earn much needed foreign exchange.

Farm income constitutes about 29 percent of the net national income. Agricultural products account

S. C. Hsieh is Secretary General of the Joint Commission on Rural Reconstruction and one of the foremost agricultural economists in the Republic of China.

for 66 percent of all exports by value. Sugar takes first place among the exports and is followed by rice, timber, pineapples, bananas, vegetables, tea and citronella oil in descending order of importance.

Chemical fertilizers constitute the bulk of imported material for agricultural production, and pesticides come second. The annual consumption of chemical fertilizers in 1963 was 760,000 metric tons, of which about 400,000 metric tons were produced locally and the rest had to be imported. Other agricultural products imported into Taiwan are cotton, wheat, and soybeans for use as raw material, respectively, for the textile, flour and edible oil processing industries.

Planning Organization and Administration

The government organ responsible for overall economic planning is the Council for International Economic Cooperation and Development (CIECD), Executive Yuan (cabinet). The Minister of Economic Affairs serves concurrently as the convener of the Production Committee under CIECD. The Committee is subdivided into an Agricultural Production Committee and an Industrial Production Committee in charge of agricultural and industrial planning, respectively. Members of the Agricultural Production Committee include the Director of the Agricultural Department, Ministry of Economic Affairs (MOEA), the Commissioner of the Taiwan Provincial Department of Agriculture and Forestry (PDAF), the Director of the Provincial Food Bureau (PFB), the Director of the Provincial Water Conservancy Bureau (PWCB), Commissioners of the Joint Commission on Rural Reconstruction (JCRR), the President of the Taiwan Sugar Corporation, and the Dean of the Agricultural College of the National Taiwan University. The Committee's primary concern is to seek and work for coordination among the programs, activities and budgets of all agencies concerned, within the framework of their respective organizations and functions. Regular meetings are held to discuss the problems and difficulties encountered by the various agencies in the execution of their individual agricultural plans which have been developed in accordance with the principles and objectives laid down in the Agricultural Four-Year Plan. Any difference of opinions relating to the Plan is smoothed out at such meetings so that there will be little difficulty in Plan implementation.

As the JCRR has made valuable contributions to the planning and implementation of the agricultural part of the Four-Year Economic Development Plans, its nature and relations with the Agricultural Production Committee should be mentioned. JCRR is a Sino-American joint organization established in 1948 by an agreement between the Chinese and American Governments and authorized to formulate and carry out a program of improvement and development in the rural areas of China. It is now composed of three presidentially appointed

commissioners, two Chinese and one American, with a technical and administrative staff of 250 persons. A semi-autonomous organization, JCRR is subordinate, on the Chinese side, to the Executive Yuan and subject to policy direction and supervision of the Premier. On the American side, it is subject to the direction and fiscal control of the Director of the China Mission of the Agency for International Development. In the past, JCRR has been an important force behind the designing and actual implementation of the Agricultural Four-Year Plans. The success of these plans owes much to the technical and financial assistance provided by JCRR.

Drafting of the Plan

In line with the general economic policies of the Government, the Agricultural Production Committee sets forth its own policies and objectives for incorporation into the Agricultural Four-Year Plans. Generally, these plans emphasize the development and improvement of the use of agricultural resources, increase in agricultural production, and expansion of export trade.

When the Government first began to prepare the agricultural section of the Four-Year Economic Development Plan in 1953, it was found that the functions and duties of some government agencies overlapped. Besides, their viewpoints did not always agree, and the personnel and budget of any one agency were often too small for it to undertake a big program alone. Without recommending changes in the status of these agencies, the Agricultural Production Committee decided that the best course to take under the circumstances would be to achieve uniformity in matters of policy and close coordination among the programs, projects and budgets of all the organizations concerned.

The drafting of the Agricultural Four-Year Plan with its operational programs and procedures of implementation is done by seven ad hoc working groups dealing respectively with the seven main fields of agricultural food crops, special crops, forestry, fisheries, animal industry, water conservation, and economic analysis. Members of the groups include specialists, representatives of farmers' associations, college professors, and responsible officials of related government agencies and public and private enterprises. Under the stringent financial condition of the Government, emphasis has been given to shifting the budget of each agency from the less to the more important projects. JCRR has continued its financial assistance together with government budget support from U. S. aid sources to these projects. In the course of planning, the budgets of various agencies for projects of similar nature are integrated. The draft Plan is then discussed, revised and finalized by the Agricultural Production Committee and submitted, in the end, to the Executive Yuan through CIECD for approval and announcement.

The outline of the Plan indicating the goals and specific working projects under each of its programs is officially announced by the Government. To follow up the overall Plan, annual goals of production set up tentatively in the Plan have to be adjusted again and again each year to meet the changing conditions of the market both at home and abroad. This is especially necessary for export products such as sugar, bananas, pineapples, mushrooms, tea, etc. The revised goals are announced at the beginning of each operational year. Then, the provincial agencies concerned undertake to work out production goals and plans for each county or city, in the light of its local conditions, to facilitate the execution of all working projects. On the basis of the regional goals, the Agricultural Production Committee, together with PCAF, PFB and other agencies, decides on the types and amounts of materials and supplies, such as seeds, chemical fertilizers and pesticides, which should either be procured locally or imported for use in agricultural production the following year.

Demand Projection in Agricultural Planning

In addition to considering the supply aspects of agricultural planning, attention must also be given to the demand projection in order to formulate a commodity balance sheet for checking the supply and demand situation under the Plan. In the Agricultural Four-Year Plans of Taiwan, the demand projection has been made on the basis of population growth and structure, changes in the national income and per capita income, agricultural raw material requirements for industrial use, effects of income on food consumption, the need for reserve stocks of the key commodities, the world market demand for agricultural products, etc. Such information is collected continuously to form the basis for adjusting the policies and programs relating to domestic production, import and export, marketing and price incentives, and other measures required for the implementation of the Plans.

Regional Goals and Plans

In order that any program or projects may have the support of the local governments at different levels and of the farmers concerned, it is important that they be given an opportunity to participate in the finalization of the regional production plans and goals tentatively drawn up by the provincial agencies. In this way, they will not feel that the projects and goals are forced upon them by the higher authorities.

A provincial conference is held at the start of each year by PDAF and PFB jointly for the discussion of problems and exchange of views concerning the county production goals and plans by the representatives of county-city government and farmers' associations and by local specialists. Similarly, county-city meetings are held each year, which

are attended by representatives of provincial agencies, county-city assemblies, and township offices and farmers' associations to discuss the township production goals and projects and the steps to be taken for their implementation. Finally, there are township meetings to allow village chiefs and heads of small agricultural units of township farmers' associations a chance to express their opinions on the village production goals and projects. Their decisions and recommendations are forwarded through the county-city government to PDAF and PFB for consideration and adoption.

By such linear coordination and by means of the two-way communication from the Agricultural Production Committee down to townships and then from townships back to the Committee, the annual agricultural production plans of Taiwan are finalized. Later, pamphlets printed by the Committee giving details of the goals, policies and projects for all items of production are distributed to provincial, county-city and township agricultural workers.

These annual production goals and plans, however, serve only as guides to the farmers. They have complete freedom to follow them or not, as any decision to increase or decrease production is theirs to take. Nevertheless, such goals and plans are necessary because they form the basis on which the needs for production requisites and materials, as well as the amount of rural credit loans from banking institutions, are planned. The supplies are usually imported or purchased locally by the government agencies concerned about six months before actual use.

The Agricultural Production Committee is responsible also for coordinating the programs of various agencies. For example, expansion of cultivated land area needs improved irrigation facilities, thus involving cooperation between two agencies; planting of windbreaks to protect farm lands calls for the support of the forestry authorities. Furthermore, the needs to process agricultural products for both domestic consumption and export, to import requisite production materials and supplies, and to get sufficient working capital for farmers' use all make it necessary for the Committee to work closely with other government organs to insure the harmonious coordination of the agricultural, industrial, trade and financial policies of the country.

General Features of the Agricultural Four-Year Plan

The overriding goal of all the developmental activities under the Agricultural Four-Year Plan is to step up crop, forestry, fisheries and livestock production for: (1) achieving self-sufficiency in food supply and better nutrition for a rapidly growing population, (2) gradually attaining economic self-support in Taiwan through the expansion of agricultural export in both quantity and variety, and (3) supporting

Taiwan's industrialization by providing industry with requisite raw material of agricultural origin.

As the land area of Taiwan is limited, the prospects for any substantial increase in cultivated area on the plains are dim. The principal targets of the Plan in this direction are to raise the unit yields of crops through technological improvement and to expand crop acreage through wide adoption of the multiple cropping system so as to make possible harvest of three or more crops from the same plot of land each year. Attempts are also made to exploit marginal slope lands in the mountain regions which offer great potentials for the growth of such economic crops as tea, citronella, pineapples, banana, citrus, etc., and for grazing to develop dairy and beef cattle farming.

As the resources are always limited for the implementation of the Plan, and the various programs under the Plan usually compete with one another for the utilization of resources; economic analysis and appraisal are needed to determine the comparative advantages of the different productive activities and developmental schemes with respect to their contributions to the national production and long-range economic development.

Field Organization for Implementation of the Plan

The Government sets its policies and maps out a plan for agricultural development. Sound and realistic as such a plan may be, it will be of little use if it is not put into execution efficiently and thoroughly with the active support and full participation of the people at the grass-roots level. Considering the great gap between the national government and individual farmers, the need is apparent for some field organizations to act as a medium to fill that gap and link the national agricultural plan and farmers together. These organizations must, on the one hand, always maintain close contact with farmers and have a profound knowledge of the local agricultural conditions, available resources and farmers' needs so that they can transmit such information to the Government for consideration in its agricultural planning. On the other hand, they must be able to stimulate and develop the initiative and self-help spirit of farmers so that the latter can readily be called upon to respond to the national Plan in the direction where their efforts are needed. In Taiwan, this intermediate role in agricultural development is played by township offices, farmers' associations, and irrigation associations.

The township office is at the bottom of the pyramid of the government structure in Taiwan and constitutes the basic unit of local administration. It consists of the township chief (elected for a term of four years), secretary, personnel officer, accountant, and five sections dealing respectively with civil affairs, finance, reconstruction, household registration and conscription administration. Counter-balancing

the powers of the township office is the township council which functions as the voice of local democracy with all its members elected through universal suffrage. Essentially democratic in nature, and with a completely independent public finance, the township office is an important link in the island's administrative chain, leading to higher levels of government at one end, and maintaining physical contact with and serving directly the people at the other. Agriculture is an important phase of the work of the township office which not only participates in the national agricultural planning, but is responsible for the implementation of the agricultural program with which the particular township is concerned.

The farmers' association is a nongovernmental cooperative society organized by the farmers themselves. It is dedicated to the promotion of farmers' interests, advancement of farming techniques and knowledge, improvement of rural living conditions, and development of the rural economy. Being the farmers' own organization and with adequate resources and physical facilities at its disposal, it is in a position to find out the real needs of its members and provide the means to meet their needs. It is organized at three levels: provincial, county (city) and township. At present, there are one provincial association, 22 county associations and 324 township associations, forming a complete pyramidal pattern from the supervisory and advisory down to the operational level. The operational level of farmers' associations is the township level. The service activities of a farmers' association include cooperative marketing and processing of farm products, purchasing of farm supplies, extension of farm loans and acceptance of deposits, distribution of fertilizers, and the sponsoring of agricultural extension service and other rural welfare services. These activities are related directly to agricultural production and farmers' life and, most important of all, they are geared to the government efforts for agricultural and rural improvements.

There are altogether 26 irrigation associations in Taiwan. They are also formed on a district basis and controlled by the farmers themselves. The main functions of an irrigation association are the management, maintenance and improvement of irrigation and drainage facilities; regulation and control of water in canals; settlement of water disputes; and land improvement and soil conservation. It also assists in the planning and implementation of regional irrigation projects in cooperation with government agencies. Irrigation is an essential factor in agricultural production. It is largely through the efforts of these local voluntary groups that the vast network of irrigation systems in Taiwan has been properly maintained, utilized and further improved.

MIT CONFERENCE ON PRODUCTIVITY AND INNOVATION IN AGRICULTURE IN THE UNDERDEVELOPED COUNTRIES

A unique conference to study the agricultural problem in the less developed countries, sponsored by the Center for International Studies of the Massachusetts Institute of Technology and financed by the U. S. Agency for International Development, was held in Cambridge, Massachusetts in the summer of 1964. For six weeks, a group of 44 participants, from a variety of countries and representing field experience in each of the major types of agricultural conditions in the underdeveloped world, lived together and discussed agricultural problems. The participants included experts from the natural sciences, economics, and the behavioral sciences. Their prolonged discussions enabled them to overcome difficulties of communication between disciplines and to avoid panaceas in their search for solutions to agricultural problems.

The MIT Conference report demonstrates the participants' awareness of the considerable scope of unanswered questions in the field of agricultural development, and of the complexities of the answers. The agriculture of the less developed world was divided into and studied as four ecological regions: the wet rice region, the monsoon and subtropical region, the rain forest region, and the high altitude region. Both regionally and collectively, the Conference also analyzed the role of physical inputs: fertilizer, water, land, seeds, tools, and machinery; and of organizational inputs: supply organization, pricing, colonization, pest control, credit, insurance, marketing, farm organization, and development organization; plus educational and research inputs.

It is not possible to summarize the results of the Conference here, but a limited number of copies of the Conference report are available upon request to US AID missions. The report is entitled Policies for Promoting Agricultural Development, Report of a Conference on Productivity and Innovation in Agriculture in the Underdeveloped Countries, David Hapgood (ed.), Cambridge (Mass.), Massachusetts Institute of Technology, Center for International Studies, 321 pp. The Massachusetts Institute of Technology expects to publish a revised version of the report in 1966.

SOCIAL ADAPTABILITY AND ECONOMIC GROWTH

SOCIAL FLEXIBILITY, SOCIAL DISCIPLINE AND ECONOMIC GROWTH

Hla Myint

[From International Social Science Journal,
UNESCO, Paris, Volume XVI, Number 2,
1964, US\$2.00, pp. 252-259.]

This is a
reprint of
most of the
article.

Our analysis in this paper is admittedly brief and impressionistic, but it is hoped that it is sufficient for the purpose of establishing two propositions.

The first and broader proposition is the existence of the wide no-man's-land of intermediate stages of social and economic development of societies in transition, which seems to have passed the purview of conventionally minded anthropologists and has not come within the purview of conventionally minded economists even when they are concerned with the underdeveloped countries. We suggest that some of the interesting and important problems of promoting economic development at this pre-take-off period -- notably the problems of building the runway as distinct from the problems of the take-off -- fall within this no-man's-land which needs to be jointly explored by economists and other social scientists. Some

Hla Myint has been Lecturer in the Economics of the Underdeveloped Countries at Oxford University since 1949; before and during this time, he acted periodically as Economic Adviser to the Government of Burma and was the Rector of Rangoon University from 1958-60.

economists still think in terms of bulldozing away the traditional social institutions of the underdeveloped countries as so many outmoded obstacles to development, and of substituting in their place their own special brand of mechanistic Utopia either in terms of atomistic, perfect competition or completely integrated economic planning. Some anthropologists still think in terms of retreating further and further away from the borders of social and economic change so that they may study the dwindling areas of unspoilt primitive cultures intact. But, the social reality facing the majority of the underdeveloped countries in a state of transition, with all its complex and conflicting drives, is somewhat more challenging and interesting than is suggested by the stereotype models of the economists and the anthropologists.

The second and narrower proposition is that there are a number of conceptual problems in speaking about investment in "social and human capital" which those who use this fashionable approach have not adequately explored. It would be nice if we could calculate the rate of return on such capital, but we are nowhere near that blissful state of quantification. In fact, in our present imperfect stage of knowledge, to try to make premature and somewhat pseudo-quantitative statements may distract attention from the important and complex qualitative problems about the relationship between economic growth and the social and economic framework in the countries at the earlier pre-take-off stages of general social and economic development. We suggest that one convenient way of sorting out these qualitative problems is to consider the conflicting requirements of social flexibility and social discipline which seem to have relevance for a large number of social situations at different stages of economic development.

The No-man's-land

There are wide variations in the general level of social and economic development not only between different underdeveloped countries but also within each underdeveloped country. The anthropologists have concentrated on one end of the scale and have mainly concerned themselves with the countries at the earlier stages of development or with the economically backward sectors within these countries. The economists, in contrast, tend to concentrate on the opposite end of the scale and have mainly concerned themselves with underdeveloped countries at the later stages of development or with the more advanced sectors within these countries. Unfortunately, some of the more important and interesting problems of development arise within the wide no-man's-land of the intermediate stages of development.

The economist's view of the no-man's-land can be best illustrated in terms of Professor Rostow's theory of the "take-off" into self-sustained economic growth. Most underdeveloped countries aspire to "take-off" in the manner described by Professor Rostow, but only a

few are ready for the process in the sense that they are anywhere near fulfilling all three of the related conditions he has laid down for a successful take-off. These are: (a) a rise in the rate of productive investment from (say) 5 percent or less to over 10 percent of national income (or net national product); (b) the development of one or more substantial manufacturing sectors, with a high rate of growth; (c) the existence or quick emergence of a political, social and institutional framework which exploits the impulses to expansion in the modern sector and the potential external economy effects of the take-off and gives to growth an ongoing character.

The underdeveloped countries trying to accelerate their economic growth generally turn their attention to Professor Rostow's conditions (a) and (b). They tend to ignore the elusive condition (c) which turns out to be the most important of the three in the sense that, unless it is fulfilled to some degree, it is not possible to keep the two other conditions fulfilled for long. Thus, according to the historical instances given by Professor Rostow of the countries which have successfully taken off in the past, condition (a) means not merely raising the rate of capital formation above 10 percent of the national income as a once-for-all effort, but keeping the economy at this high level of capital formation for at least two or three decades before it can hope to attain a self-sustaining momentum of growth. This requires a capacity not only to mobilize savings but also to "absorb" capital and invest it productively to yield a high enough rate of return to sustain the continuous process of a high rate of reinvestment, which is beyond the present capabilities of the institutional and organizational framework of many underdeveloped countries. Similarly, condition (b) does not merely mean setting up a few factories which are indifferently run and managed and have to be maintained by heavy subsidy or protection from the government. It requires the development of the "primary growth sectors," based on innovations, new methods of production, discoveries of new resources and new ways of exploiting existing resources which will serve as the "leading sectors" to the rest of the economy. Here, again, the important role of the institutional framework both in stimulating these vital points of growth and in transmitting their effects to the rest of the economy is fairly obvious.

The truth of the matter is that although economic writings on the underdeveloped countries are full of proposals to launch them into self-sustained growth, only a few of these countries are ready for it. Many of them are handicapped by the lack of an effective institutional framework required for the process. To expand Professor Rostow's metaphor: a few of the underdeveloped countries, ready for the take-off, are already taxiing along the runway. For them the final spurt of speed in investment and general economic activity, if properly carried out and sustained, might conceivably enable them to become airborne. But many other underdeveloped countries have not yet got to this stage;

they are still in the process of building their runways. Now, whether we are talking about aeroplanes or developing economies, we should expect the problems of getting airborne to be very different from the problems of building the runway.

Unfortunately, Professor Rostow does not give us very much help about the second type of problem. He has merely stated that before the underdeveloped countries are ready for the final take-off they have to pass through a long "pre-take-off" period, which in the case of the Western countries, for instance, took about a century or more. Beyond this, we are left to our own devices to try to identify the various sub-stages of the pre-take-off period at which many of the underdeveloped countries seem to be situated at the present moment, and to try to assess how far economic policies designed to assist the take-off at a later stage of development are relevant for the problems of building the runway at the earlier stages of development.

This tendency to neglect the earlier pre-take-off stages of the underdeveloped countries is, of course, not peculiar to Professor Rostow, but is fairly widespread among economists. We have chosen his theory as our example because it is well known and also because it is explicitly stated in terms of stages of development, thus clearly revealing the gap in our knowledge about the earlier stages of economic development represented by the no-man's-land between anthropology and economics.

Economic Ventures into the No-man's-land

From the economist's side of the border, however, two distinct lines of approach have been made to explore the no-man's-land. The first consists in the various studies of the process of the spread of the money economy in the markets for commodities and for factors of production, notably labour, breaking down the self-sufficiency of the subsistence economies of the traditional societies. In this approach, the problem of stimulating economic development is looked upon mainly in terms of the growth of free market institutions and the growth of competitive economic individualism, breaking down the traditional communalism of the village, the tribe or the extended family. The general direction of development is conceived in terms of greater flexibility and adaptability of the social and economic framework, stimulating and responding to further changes.

The second line of approach consists in extending the ideas of investment and capital formation, originally used in relation to material capital, to "social and human capital." In this approach, the problem of economic growth is looked upon mainly in terms of increasing the rate of investment, not only in improving the physical infrastructure such as transport and communications and public utilities, but also in

improving what may be called the "social infrastructure," notably in the level of education, research, technical skills and health. In order to increase the rate of investment, an increasing amount of resources has to be mobilized, and in order effectively to carry out this programme of investment both in material and human capital, the social and institutional framework must be capable of enforcing some degree of consistency and coherence both in the mobilization and in the allocation of resources. Thus, the general direction of development is conceived in terms of a greater degree of social discipline and authority to push through the desired pattern of economic planning. We are faced then with the conflicting requirements of social flexibility and social discipline, a conflict which seems particularly sharp at the earlier, pre-take-off stages of development.

"Social Capital": Conceptual Difficulties

Since the broad patterns of the growth of the money economy in the underdeveloped countries are familiar, we shall concentrate on the second line of approach based on investment in social and human capital. This idea has proved attractive to many people, both economists and noneconomists, and there have been attempts to consider how to strike a correct balance between investment in material capital and investment in human capital, between economic development and social development. Unfortunately, however, as currently stated, this idea remains rather vague, based upon an analogy which has not been systematically drawn. Thus, we may begin by drawing attention to some of the conceptual problems as they appear to an economist.

To begin with, even with respect to material capital, there is no simple mechanical relationship between the amount of resources invested and the value of the capital formation which results from it, although national income statistics automatically equate the two. The problems of trying to establish a causal quantitative relation between the expenditure on resources invested and the value of capital formation which results from it are multiplied many times when we move from material capital to human capital. To start with the most general difficulty: in dealing with material capital, the economists have a reasonably clear idea of what they mean by the productive structure and how an additional piece of material capital may contribute to it, either by changing and improving its efficiency or by fitting into an identifiable gap. But, no such established conceptual framework exists when we move to human capital. By analogy, we must suppose that the value of a given investment in human capital will depend on its contribution to the "social infrastructure," either by improving and changing this infrastructure or by fitting into a gap in it. But what is this "social infrastructure" and in what direction do we wish to change and improve it?

If hard pressed to define this "social infrastructure," the economist can only carry the analogy one or two stages further. He would suppose that in the same way as there is an intimate connexion between the material production structure of a country and its natural resources, there would be a similar connexion between the social infrastructure and the social conditions and characteristics of a country. Material production structure represents the adaptation and improvement of natural resources through investment in material capital. Some investment would exploit the special advantages of these natural resources and other investment would make up for the deficiencies in these natural resources. The economist would then have to ask the other social scientists whether this analogy is meaningful when extended to cover the relationship between the social infrastructure and the social conditions of a country.

Carrying the analogy a stage further, the economist would point out that the consequences of a wrong choice of investment project may be very different between material capital and human capital. Frequently, a wrong investment in material capital and attempts to salvage it have a distorting effect on the whole production structure. For instance, a wrongly sited railway system or a factory which is a "show piece" but uneconomic may be maintained by government subsidy, grants of exclusive monopolistic privileges, or protection against foreign competitors. But as a last resort, a wrong investment in material capital can be scrapped when it proves too expensive to salvage. Wrong choice of investment in human capital will presumably have similar distorting effects on the social infrastructure, but wrong pieces of human capital cannot be scrapped; they tend to be self-perpetuating and have the habit not merely of distorting but actually of disrupting the social infrastructure. For instance, the growing problem of graduate unemployment in Asian countries, owing to the production of too much of the wrong type of "human capital" is a very clear illustration of this danger.

In this connexion, it may be noted that, for the economist, the material production structure of a country is a different thing from the economic institutions which mobilize resources and feed them into the production structure. But, when we come to the concept of social infrastructure, the distinction between these two different functions is blurred. As currently used, the idea of social infrastructure seems both to serve as the social equivalent of the production structure which absorbs resources, and also to have the more active function of the social and institutional framework which mobilizes and allocates resources. This makes assessment of the productivity of investment in human capital doubly difficult. For instance, increased educational opportunities, say through films, radio and other mass media, may widen the horizons of the people and stimulate the growth of new wants (through demonstration effects) and new ideas. This may possibly

increase the long-run productivity of the people and thus may be regarded as an improvement in the social infrastructure in the first sense. However, the effect of these new educational opportunities may also weaken and disrupt the ability of existing social values and social hierarchies to mobilize resources and thus undermine the social infrastructure in the second sense.

Investment in Education: An Example

The difficulty with the concept of social capital may be further illustrated by human investment in higher education for economic development where the greatest long-run increases in productivity have been frequently claimed. When people make this claim, they have two distinct ideas at the back of their minds.

First, they are thinking of the dynamic effects of higher education in stimulating new discoveries and innovations and in adopting new methods of production. This implies a sort of intellectual yeast which will ferment and change the whole of the production structure and presumably the social infrastructure with it. Here, the productivity of investment in human capital is conceived in terms of greater flexibility and adaptability of the social and institutional framework, which will create favourable conditions both in stimulating changes and for receptiveness and adaptability to these changes. Second, they are also thinking of shortages of skilled people of particular types who are needed as "missing components" to be fitted into a desired pattern of economic development.

Of course, some flexibility has to be allowed, even in the most rigid and comprehensive type of planning. But, it is fair to say that the basic reasons for claiming high productivity as a result of investment in education are different in these two types of argument. In popular terms, the first type of argument is thinking in terms of creating square pegs to fit into round holes with the hope that the pattern of holes will be stretched and changed into more productive directions. The second type of argument is thinking in terms of trying to create round pegs to fit into round holes, as though fitting the missing pieces into a jigsaw puzzle within the framework of a given and fixed pattern of production and planning requirements.

These conflicting considerations become bewildering when we look closely at the skilled manpower problems of any newly independent countries. First, there is an obvious need to fill up the gaps left in the civil service, and those left in all sectors of the economy by departing foreign personnel. The missing components have to be produced to maintain the old economic and administrative structure. But, at the same time, there is great desire to change very quickly "the old colonial structure," not only politically, but also economically and socially.

Logically, one might perhaps expect a great upsurge of a liberal educational policy encouraging individualism, enterprise and innovations to break down the rigidities both of traditional and of the colonial systems. But, given the prevailing intellectual view that such quick change can be forced through only by economic planning, the prevailing bias is against both economic liberalism and "liberal education" in favour of detailed skilled manpower planning integrated with programmes of technical education which ideally should specify the exact type of training and the exact number of trainees. Thus, we get back to the problem of manufacturing the "missing components" for the jigsaw puzzle, the only trouble being that the old puzzle has been torn down and the new puzzle has not been constructed.

Flexibility and Discipline: Conflicting Growth Requirements

If the newly independent countries are vague and ambivalent about the general direction in which they wish to change their "social infrastructure," the social forces and the social and institutional framework which they can use to carry out these changes are weak and diffused and in varying stages of disintegration. On the economic side, it is well known that the growth of the money economy, while imparting flexibility, has undermined the coherence of the traditional societies. On the political side, even indirect rule through indigenous authorities has frequently had the same effect. With the new countries which have gone through an intense phase of nationalistic revolt against colonialism, this process itself has further undermined the framework of social authority and discipline. Thus, the difficulties which new countries have in trying to implement their plans are not only due to the lack of technical skills and know-how, but also to a disintegration, if not a complete breakdown, of cohesive social values which contribute to social discipline.

The value of a cohesive force of social discipline in promoting economic development is now becoming increasingly recognized. The classical illustration of this is perhaps the role of the Japanese "feudal discipline" which enabled Japan's ruling classes to carry out a fairly ruthless but effective process of economic development behind a protective shell against disruptive outside influences. It would be an interesting task to find out how far the surviving traditional social institutions in a continent like Africa are capable of serving this role in promoting economic development both at the local or tribal level, such as in cooperative societies and community development schemes, and for larger units which can take advantage of the economies of scale and complementary projects. One obvious difficulty about using the traditional social forces such as "feudalism" or the caste system is the prevailing political idea of equality which raises the well known conflict between economic equality and economic growth, not only with

respect to income distribution but also with respect to the distribution of economic activities and economic and social roles.

To illustrate from our example of investment in education: many people, even when they stress the importance of investment in human capital, look upon the resources to be invested mainly as sums of money or material resources, such as college buildings, laboratories, libraries, hospitals, etc. But as every university teacher knows, the really scarce resource is the "human input": teachers of suitable ability and qualifications, the supply of whom cannot be expanded quickly in the short run, perhaps not dramatically even in the longer run. Moreover, the production of further such high-quality human capital requires some restriction of entry to universities and training colleges so that those who are admitted get proper, intensive training. But, this conflicts with the prevailing ideals of new countries to provide university education for almost everyone, and few of the countries have been able to exercise the necessary social and political discipline to restrict numbers in this really vital process of supplying further human capital goods of suitable quality. That is to say, although most people talk about increasing "investment in education," few of them are prepared to "tighten their belts" to save the scarce teaching capacity for the training of further human capital to the minimum degree of "capital intensity" necessary to make this process a success.

SOCIAL STRUCTURE, CULTURAL VALUES AND ECONOMIC GROWTH

Cyril S. Belshaw

[From International Social Science Journal,
UNESCO, Paris, Volume XVI, Number 2,
1964, US\$2.00, pp. 217-228.]

These are
excerpts
from the
article.

There are clearly a variety of contexts in which economic growth can take place successfully. The institutions of Japan, the United States, the U. S. S. R. and China differ substantially, yet permit growth to take place, at differing rates and with variations in emphasis. One wonders whether it is possible to go beyond the particularities of specific institutions and cultural patterns to generalize in a useful way about the significance of relationships. Presumably, the analysis should not posit a direct relationship between one or more items of social structure or of values and income growth. The relationships are indirect and influence the component parts of a system of production and distribution.

Among the significant elements in such a system are authority and decision taking, the availability and use of material resources and of skills, organization, a distributive mechanism, and an adaptive integration. To some degree, values and social structure influence the nature of each of these elements, and their ability to perform adequately within the system.

Cyril S. Belshaw is Professor
of Anthropology at the
University of British Columbia,
Canada.

The Role of Structural Forms

With respect to social institutions, I wish to draw attention to three sets of problems of general interest to economic growth. These are the structural forms with respect to which economic growth may or may not take place, the degree to which adaptability is possible within relevant social structures, and the instrumental effectiveness of elements of a social structure.

Each society has its own range of principles which govern social relationships. Since many of them are deeply internalized, are habitual and intangible rather than consciously designed, and are not normally directly attacked by Western technicians or reformers who often do not understand their nature, they are relatively enduring. This is particularly the case, for example, in family structure, and in the structural arrangements of small groups which may be concerned with decision making. I am not arguing, of course, that such structural arrangements are unchanging in the face of pressure, but merely that there is a conservative element. I then go on to ask: insofar as traditional social arrangements do retain their older forms, what can be said about their effect on economic growth?

The reason for putting the question in this way is that there still seems to be a considerable body of opinion which holds that social structure must approximate Western forms before economic growth can be expected. This should be disputed on theoretical and on empirical grounds.

Positively, a social structure represents the framework within which persons act and organize to get things done. To give some examples: when I appealed to individual acquisitiveness in Fiji to persuade villagers to build me a small jeep bridge, they performed a shoddy job because their individual interests were elsewhere. When I was able to relate the same requirement to a contract based on structural relations between my own social unit and theirs, with the appropriate symbolic manipulations of structured ceremonial exchange, a first-class piece of work was done. Again, lineage principles can be used for the mobilization of capital and labour: the family structure of China and Japan can be as significant in the formation of enterprises as was that of Europe in the early days of the industrial revolution.

My contention is that social structure does not, in itself, either inhibit or promote economic growth. It does, however, have an important bearing upon the forms of organization for economic growth which are appropriate in given circumstances. Thus, if economic planners can identify the principles of cooperation and adaptation which are inherent in their society, they should be in a position to mobilize them to provide vehicles for organization. To do otherwise would be

to overlook an important creative potential, and perhaps to engage in unnecessary schism and controversy, diverting attention from the real issues. It is not necessary to turn a matrilineage into a patrilineage or to create a nuclear family before economic growth can take place, and to attempt to do so may delay the take-off for a considerable period of time.

In adopting this position, I am emphatically not attempting to argue that traditional social structures in their pristine state contain within themselves all the forms of organization which are necessary for economic growth to take place. Neither am I denying that changes in social structure will take place as a result of the forces unleashed during the process of economic growth. Again, I do not deny that some "societies" are so schismatic and pluralistic that integrated action is impossible.

The Adaptability of Traditional Societies

Evidence has been consistently accumulating in anthropology that traditional social structures are highly adaptable and flexible mechanisms. This evidence has tended to be concealed or misinterpreted for a number of reasons. Within the time-spans of direct anthropological investigation, the amount of indigenously stimulated change observed has been minimal, and there has been a tendency to stress conservatism, tradition and custom in delineating the characteristics of a society. The very word "structure" implies stress on continuity.

Field studies of social change have also indicated that a common result of administrative order and similar pressures has been to reduce rather than to increase the adaptability of social systems. My own observation in Fiji, for example, indicates that the system of land registration in that colony did not take into account sufficiently the competitive and adaptive principles which underlay the relationships between families and lineages, and the modifying effects of influences which lay outside the lineage system but which nevertheless were part of the social order. The new system, intended to protect and to create order, did so at the cost of flexibilities which could have contributed to economic growth. Similarly, in many colonies, the position of chiefs has been stabilized and supported by alien sanctions, reducing the impact of traditional processes which made chiefs answerable in terms of results. We must be cautious in implying that ascription of roles is inconsistent with or contrary to achievement.

But, clearly, within a continuous system, adaptation between individuals and groups must be a characteristic feature. Dorothy Lee, for example, (Freedom and Culture, New Jersey, Prentice Hall, 1959) has used ethnographies to show the ways in which individuals can act creatively and freely within apparently limited cultures. Raymond

Firth (Elements of Social Organization, London, Watts, 1959) stresses the scope for preference and choice. Edmund Leach (Pul Eliya, a Village in Ceylon, London, Cambridge University Press, 1961) demonstrates that the ideal description of a social structure can give too static an impression, for behind the rules lie the interpretations of them, and their manipulation for personal and group interest.

Admittedly, then, it cannot be assumed that the adaptabilities of traditional societies were oriented toward economic growth. My point is rather that, given an orientation toward economic growth derived from other aspects of the cultural reality, adaptability is a necessary prerequisite to success. It is incumbent on those who guide policy to discover the adaptive forces in the society before them, and to use them rather than to ossify the society by the application of rules and methods which inhibit them.

Instrumental Effectiveness and Truncated Societies

The greatest and clearest defect in traditional social structures is that they do not provide sufficient forms of organization for instrumental effectiveness throughout the complex range of activities necessary for economic growth to take place. In this sense, certain functions -- such as those of banking, credit supply or marketing -- are either not performed or are inadequately developed. As discrete tribal and similar groups are brought within the bounds of colonies or new national states, such functions continue to be defective, or are concentrated in particular social groups or geographical areas. Some writers, such as Hirschman, would argue that differentiation of economic systems within a rapidly developing country does not in fact hold back total economic growth, provided there is minimal integration so that some form, at least, of distribution of results takes place. Nevertheless, the absence of essential functions in an economy as a whole can hold it back, and the social structure must expand in scale and complexity by the creation of new institutions.

As we have seen above, the new institutions do not have to be of Western or capitalist form, provided they meet the essential requirement of providing for decision taking and executive action. It may be simpler to copy Western forms, or to amend traditional forms toward a Western pattern, rather than innovate; but this can only be successful if the structure of new organizations is consistent with the types of social relations, and the nature of decision making and authority is such that the members of the organizations recognize it to be valid for them.

Any integrated social structure can become a basis for economic growth. Whether in fact it does or does not depends on whether innovation is directed toward expanding it in scale so that new functions

can be performed, and whether its component parts are related to goals and objectives which are consistent with economic growth. That is, the keys to economic growth are to be found, not in the forms or principles of the social structure, but in the specifics of organization, and the nature of the value system.

Values and Economic Growth

In the field of values, there are few barriers to economic growth, and these can usually be clearly identified. The problem is not so much to destroy what might stand in the way, but to build on what is there, and to supplement existing arrangements where necessary.

While it would be tempting to rely on the notion of insatiable, expanding demand for consumption goods as the carrot for economic growth, this would not be valid because of cost limitations. Thus, selections must be made as to which preferences will be satisfied. The selection among values for entry into an effective demand schedule is not dependent merely upon their absolute relationship to one another. In the first place, there are, particularly in underdeveloped countries, costs which are involved in cultural change. Thus, there are limitations to the range of potential demand from which new values might be chosen, and this range is dependent upon the existing pattern and practical possibilities of production and supply.

Insofar as these selections are made consciously by responsible authority, they will have varying effects upon economic growth. It is possible, for example, to select goals by reference to some standard of welfare (hospitals), or to an arbitrary concept of acculturated patterns (types of clothing), or to preferences revealed by earlier cash market behaviour. None of these are, in themselves, adequate, since they do not posit an accurate relationship to growth. Each type of reference does, however, provide data about values which can be used in further analysis.

In order to bring the analysis nearer to the relationships we are seeking, I suggest that it is desirable to introduce notions about the way in which values are linked with one another, and particularly to refine ideas about the differences in multiplying effect as between values. Far too frequently, productive effort is directed toward a specific point in demand which has no further ramifying consequences for other aspects of demand. Thus, inadequate village schools do not increase the demand for learning or anything else. A change in agricultural practice may improve social conservation and improve leisure, without establishing further unsatiated wants. In contrast, a good school may increase the demand for further education, or a road the demand for city goods. In either case, there is a multiplication of demand, with an alteration in the value pattern such that people are

more prepared to meet new costs, and hence are motivated to further action. There is thus a case for concentrating supply to encourage such changes.

Unbalance in Growth

The point is reinforced by the consideration that disequilibria call forth rectifying action and generate change. This does not imply necessarily that there should be conflict, disruption, disorganization, or similar stresses which can inhibit action and discourage creativity. It implies a more or less systematic framework -- pattern of values or social structure -- by reference to which adjustments can be made.

Nevertheless, it suggests, as Hirschman has pointed out, that balanced growth as commonly used in developmental circles may not, in fact, be a prerequisite to economic growth, and that undue stress upon it may, in fact, inhibit both growth and welfare.

Balanced growth implies that planned action must see to it that each element in a productive system alters immediately and in harmony with others. Thus stresses, bottlenecks, undue emphasis on material things, or profit to the detriment of the culture or welfare will be avoided. One may validly continue to argue that balanced growth, equilibrium, perfect adjustment represent ideals toward which one must work. But, one may also argue, as I understand Hirschman to have done, that lack of balance will have a more stimulating effect than balance itself. In other words, if you have not yet achieved your ideal goal in terms of income levels, it is better to be out of balance, thus being self-stimulating and injecting alterations which will lead to further growth. It might be argued that it is better to create a good school at the village level rather than to use the same resources for a poor school and a poor dispensary, since the good school would engender a demand for a good dispensary.

This kind of example, however, suggests a modification to the position. It will clearly not always be the case that desirable gaps will be filled, however critical they may be. Thus, notions about linkage are essential to the planning of success. The case for the good school receiving priority would depend on whether one could predict the linkage. Predictions of such a nature can sometimes be more accurate when attempted on a national scale. For example, a high educational standard may lead to a demand for medical services, whereas this would not necessarily apply to the activities of microcosmic communities. Prediction can be more accurate on other occasions when intimacy of knowledge about local conditions and institutions can reveal the relationships more surely. This suggests that differing sets of

propositions will be relevant at different levels of planning or decision taking, from that of the locality up to the state level.

Necessary Functional Elements for Economic Growth

It seems desirable to set out the necessary functional elements in an economic system undergoing the experience of growth, and to match these with values and institutional arrangement. The following rather random list indicates the kind of functional elements I have in mind:

- Effective decision taking in productive and distributive units.
- Patterns of exchange such that the units can obtain the goods and services necessary as factors of production.
- Orientation of managers toward economizing and expansion.
- Provision for the "enskillings" of the managerial and labour force.
- Availability of physical factors of production at suitable prices where increased consumption of them is indicated.
- Provision of financial capital and credit facilities.
- A system of physical and technical/commercial information communications.
- A system of marketing products.
- A system of pricing or evaluating transactions.

Elementary though such broad categories may seem to be, they are often lacking in effective form, and they can provide a check list for assessing the adequacy of institutional arrangements. Moreover, the institutions fulfilling these functions must be interlocking in a mutually adaptive manner. In other words, there must be reaction mechanisms so that institutions can respond to changing conditions.

Action to Overcome Traditional Inertia

Economic growth implies a dynamism in society. At various points in the preceding argument I have referred to such matters as "orientation toward expansion" or "stimulation of change." The underlying point of view needs to be brought out into the open more fully. Some societies, particularly traditional ones, seem to have been in a state of static equilibrium, such that adjustments were entirely within a self-perpetuating system, save for cataclysm or critical pressures from outside the system. Many of the innovations introduced from the Western world, including some brought by government, have been incorporated in such a way that they have not produced a permanent dynamic, but have merely changed one form of static into another.

It is no longer possible for such conditions to be characteristic of nation-states, except in highly atypical circumstances, for forces of change are now linked on a world-wide scale. Nevertheless, the problem still remains when we consider alternatives of policy, because it

is possible for governments to concentrate too high a proportion of their efforts on activities which do not introduce or support a dynamic. This is very clearly the case where intervention is based on the introduction of a physical facility or technical innovation, without consideration of the implications for values and social organization. It is one thing to introduce a new agricultural method, to build a road, or provide a dispensary. It is a totally different thing to stimulate the values and organization that permit communities and institutions to expand their activities and horizons through their own initiative.

Such a task is a primary objective of such movements as community development. Even in this context, however, the community development organization tends to concentrate on enabling specific tasks to be achieved, rather than on creating dynamism. There are very few recorded examples in which a community development team has withdrawn, leaving behind a securely established organization for growth.

While it is true that economic growth began in European and American countries with very little assistance from persons able to carry out systematic analysis in the social sciences, the situation is quite different today. Under contemporary conditions there is an expectation that the process can be speeded by the application of knowledge about methods. There is recognition that questions to be solved are not merely commercial or technical. It ought to follow that governments would regard socio-economic advice as valuable, and would make provision in their organizational plans for its application as a resource.

That this is not done as a matter of course is partly, though not wholly, a reflection of the lack of success in the social sciences to date in putting together their knowledge in such a way that individual specialist officials can be trained to analyse complex situations from the point of view of growth, bearing in mind that growth is not merely a form of economic adaptation. It also involves processes analysed in political science, sociology, and anthropology, and techniques considered in such disciplines as community and regional planning, social work, and adult education. I would hold that the provision and use of professionals of this character for association with all levels of government would have an important impact on economic growth in those countries where the public sector looms large.

Because many social structures are oriented toward limited traditional functions and do not make provision for institutions specializing in the total range of functions of the kind listed above, it is necessary to identify a source of authority which will concern itself with the creation and stimulation of relevant institutions. If this central task is not fulfilled, the appropriate amendment of institutions

will perforce be left to the slow and painful trial and error methods associated with social evolution. Clearly, under such circumstances the source of authority will be government.

This means that government is a most significant force affecting the foundations upon which economic growth will be built, and that success or failure, particularly in the early stages of growth, can be attributed closely to the efficacy or ineffectiveness of government in handling the institutional problems involved.

A further implication is that the relationship between organs of government at all levels and economic growth functions ought to be a direct one in many cases where, in established economies, the relationship is indirect. For example, it may be necessary for central government to stimulate the development of local farms, transport and marketing services, in such a manner that they grow out of the interests and needs of local communities. For many reasons (such as limited supply of suitable managers or the difficulty of relating stock company organization to local methods and initiatives, or the desirability of tapping local ideas in terms of evaluating possible projects) it may be desirable that the analysis, planning and execution of such projects be made a local responsibility and that this be done most appropriately through a governmental institution.

Thus, economic growth can be affected by the types of responsibilities allocated to junior levels of government, such as local authorities. Conversely, an analysis of the institutional requirements of economic growth will suggest amendments in the conception and organization of local government. In many respects, this may prove to be one of the most significant points for creative thought and action in designing more viable economic systems to meet the challenge of growth in newly developing countries.





